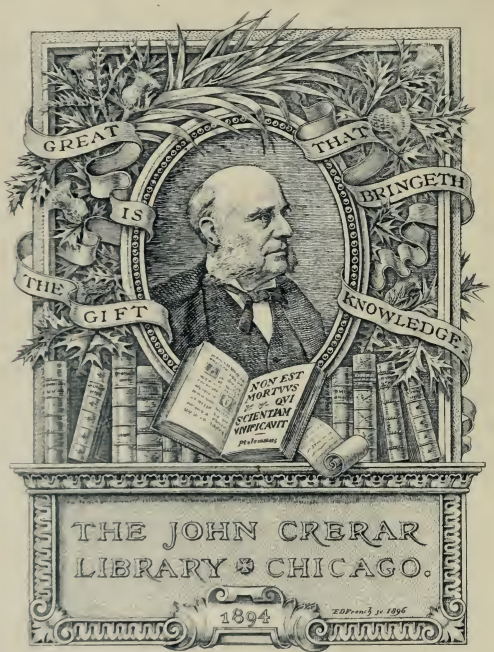

GREAT IS THE GIFT
THAT BRINGETH KNOWLEDGE
NON EST MORTUUS QUI SCIENTIAM VIVIFICAVIT
THE JOHN CRERAR LIBRARY ✪ CHICAGO.
1894

PRESENTED BY

University of Maine

Digitized by the Internet Archive
in 2013

http://archive.org/details/catalogfor0609univ

378.741
MH1

THE MAINE BULLETIN

VOL. IX OCTOBER, 1906 NO. 2

THE MAINE LIBRARY

CATALOG

OF

THE UNIVERSITY OF MAINE

1906-1907

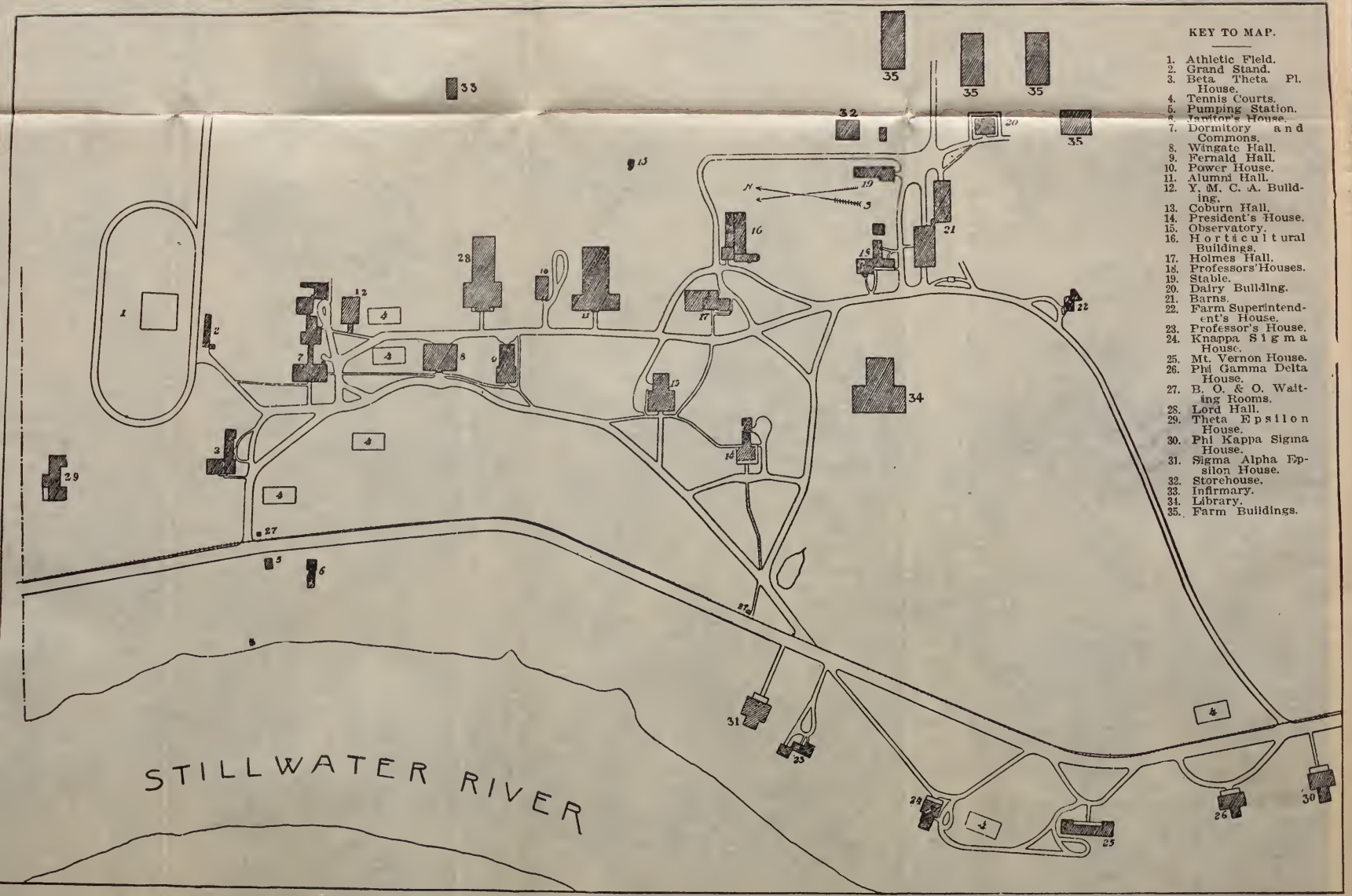
Published Monthly by the University

Entered at the Post Office at Orono, Maine, as second-class matter

THE
JOHN CRERAR
LIBRARY

CATALOG

THE JOHN CRERAR LIBRARY


KEY TO MAP.
1. Athletic Field.
2. Grand Stand.
3. Beta Theta Pi House.
4. Tennis Courts.
5. Pumping Station.
6. Janitor's House.
7. Dormitory and Commons.
8. Wingate Hall.
9. Fernald Hall.
10. Power House.
11. Alumni Hall.
12. Y. M. C. A. Building.
13. Coburn Hall.
14. President's House.
15. Observatory.
16. Horticultural Buildings.
17. Holmes Hall.
18. Professors' Houses.
19. Stable.
20. Dairy Building.
21. Barns.
22. Farm Superintendent's House.
23. Professor's House.
24. Knappa Sigma House.
25. Mt. Vernon House.
26. Phi Gamma Delta House.
27. B. O. & O. Waiting Rooms.
28. Lord Hall.
29. Theta Epsilon House.
30. Phi Kappa Sigma House.
31. Sigma Alpha Epsilon House.
32. Storehouse.
33. Infirmary.
34. Library.
35. Farm Buildings.
STILLWATER RIVER

CATALOG

OF THE

UNIVERSITY OF MAINE

1906-1907

ORONO, MAINE

AUGUSTA
KENNEBEC JOURNAL PRINT
1906

JULY

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	..	..	..	..

AUGUST

S	M	T	W	T	F	S
..	..	..	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	..

SEPTEMBER

S	M	T	W	T	F	S
..	..	..	..	..	..	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	..	..	..	..	..	..

OCTOBER

S	M	T	W	T	F	S
..	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	..	..	..

NOVEMBER

S	M	T	W	T	F	S
..	..	..	..	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	..
..	..	..	..	..	..	..

DECEMBER

S	M	T	W	T	F	S
..	..	..	..	..	..	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	..	..	..	..	..

JANUARY

S	M	T	W	T	F	S
..	..	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	..	..

FEBRUARY

S	M	T	W	T	F	S
..	..	..	..	..	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	..	..

MARCH

S	M	T	W	T	F	S
..	..	..	..	..	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	19	19	20	21	22	23
24	25	26	27	28	29	30
31	..	..	..	..	..	..

APRIL

S	M	T	W	T	F	S
..	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	..	..	..	..

MAY

S	M	T	W	T	F	S
..	..	..	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	22	01	22	23	24	25
26	27	28	29	30	31	..
..	..	..	..	..	..	..

JUNE

S	M	T	W	T	F	S
..	..	..	..	..	..	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	..	..	..	..	..	..

JULY

S	M	T	W	T	F	S
..	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	..	..	..

AUGUST

S	M	T	W	T	F	S
..	..	..	..	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

SEPTEMBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	..	..	..	..	..
..	..	..	..	..	..	..

OCTOBER

S	M	T	W	T	F	S
..	..	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	..	..

NOVEMBER

S	M	T	W	T	F	S
..	..	..	..	..	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
..	..	..	..	..	..	..

DECEMBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	..	..	..	..
..	..	..	..	..	..	..

JANUARY

S	M	T	W	T	F	S
..	..	..	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	..

FEBRUARY

S	M	T	W	T	F	S
..	..	..	..	..	..	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

MARCH

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	14	25	26	27	28
29	30	31	..	..	..	..
..	..	..	..	..	..	..

APRIL

S	M	T	W	T	F	S
..	..	..	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	..	..

MAY

S	M	T	W	T	F	S
..	..	..	..	..	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	..	..	..	..	..	..

JUNE

S	M	T	W	T	F	S
..	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	..	..	..	..
..	..	..	..	..	..	..

CALENDAR

FALL TERM, 1906

September 17,	Monday,	Arrearage examinations begin.
September 18,	Tuesday,	Entrance examinations begin.
September 19,	Wednesday,	Registration begins, 1.30 P. M.
September 20,	Thursday,	Fall term begins.
November 27,	Tuesday,	Meeting of the Board of Trustees.
November 28,	Wednesday,	Thanksgiving recess begins, 5.30 P. M.
December 3,	Monday,	Thanksgiving recess ends, 12 M.
December 7,	Friday,	Sophomore prize declamations.
December 22,	Saturday,	Christmas recess begins, 5.30 P. M.
December 29,	Saturday,	Arrearage examinations begin (Spring term studies).

1907

January 2,	Wednesday,	Christmas recess ends, 7.45 A. M.
February 1,	Friday,	Fall term ends.

SPRING TERM, 1907

February 2,	Saturday,	Registration.
February 4,	Monday,	Spring term begins.
February 22,	Friday,	Washington's birthday, a holiday.
April 1,	Monday,	Spring recess begins, 7.45 A. M.
April 5,	Friday,	Arrearage examinations begin (Fall term studies).
April 8,	Monday,	Spring recess ends, 7.45 A. M.
April		Fast day, a holiday.
May 20-26,		Junior week.
June 6,	Thursday,	Entrance examinations begin.
June 9,	Sunday,	Baccalaureate address.
June 10,	Monday,	Convocation.
June 10,	Monday,	Class day.
June 10,	Monday,	Reception by the President.
June 11,	Tuesday,	Meeting by the Board of Trustees.
June 11,	Tuesday,	Receptions by the fraternities.
June 11,	Tuesday,	Alumni luncheon.
June 11,	Tuesday,	Address before the Phi Kappa Phi Society.
June 12,	Wednesday,	COMMENCEMENT.
June 12,	Wednesday,	Commencement dinner.
June 12,	Wednesday,	Meeting of the Alumni Association.
June 12,	Wednesday,	Commencement concert.
July 1,	Monday,	Summer term begins.
August 2,	Friday,	Summer term ends.

Withdrawn
378.741 266212
NH1

FALL TERM, 1907

September 16,	Monday,	Arrearage examinations begin.
September 17,	Tuesday,	Entrance examinations begin.
September 18,	Wednesday,	Registration begins, 1.30 P. M.
September 19,	Thursday,	Fall term begins.
November 26,	Tuesday,	Meeting of the Board of Trustees.
November 27,	Wednesday,	Thanksgiving recess begins, 5.30 P. M.
December 2,	Monday,	Thanksgiving recess ends, 12 M.
December 6,	Friday,	Sophomore prize declamations.
December 22,	Sunday,	Christmas recess begins, 5.30 P. M.
December 28,	Saturday,	Arrearage examinations begin (Spring term studies).

1908

January 2,	Thursday,	Christmas recess ends, 7.45 A. M.
January 31,	Friday,	Fall term ends.

SPRING TERM, 1908

February 1,	Saturday,	Registration.
February 3,	Monday,	Spring term begins.
June 10,	Wednesday,	COMMENCEMENT.

CALENDAR OF THE COLLEGE OF LAW

1906

October 3, Wednesday, Fall term begins.
December 19, Wednesday, Fall term ends.

1907

January 9, Wednesday, Winter term begins.
March 20, Wednesday, Winter term ends.
March 27, Wednesday, Spring term begins.
June 12, Wednesday, COMMENCEMENT.
October 2, Wednesday, Fall term begins.
December 18, Wednesday, Fall term ends.

1908

January 8, Wednesday, Winter term begins.
March 18, Wednesday, Winter term ends.
March 26, Wednesday, Spring term begins.
June 10, Wednesday, COMMENCEMENT.

THE BOARD OF TRUSTEES

Hon. HENRY LORD, President	Bangor
Hon. ELLIOTT WOOD, Secretary	Winthrop
Hon. EDWARD BRACKETT WINSLOW	Portland
Hon. JOHN ALFRED ROBERTS, M. A.	Norway
Hon. ALBERT JOSEPH DURGIN	Orono
Hon. CHARLES LESTER JONES	Corinna
EDWIN JAMES HASKELL, B. S.	Westbrook
Hon. WILLIAM THOMAS HAINES, LL. B., LL. D.	Waterville

EXECUTIVE COMMITTEE

Trustees LORD and WINSLOW

TREASURER

Hon. ISAIAH KIDDER STETSON, Ph. B.	Bangor

ADVISORY BOARD FOR THE COLLEGE OF LAW

Gen. CHARLES HAMLIN, M. A., President	Bangor
Hon. HENRY BRADSTREET CLEAVES	Portland
Justice ALBERT MOORE SPEAR	Gardiner
Hon. WILLIAM THOMAS HAINES, LL. D.	Waterville
Hon. HERBERT MILTON HEATH, M. A.	Augusta
Chief Justice ANDREW PETERS WISWELL, LL. D.	Ellsworth
Dean WILLIAM EMANUEL WALZ, M. A., LL. B., Secretary	Bangor

THE EXPERIMENT STATION COUNCIL

PRESIDENT GEORGE EMORY FELLOWS, PH. D., LL.D.	*President*
DIRECTOR CHARLES DAYTON WOODS, SC. D.	*Secretary*
JOHN ALFRED ROBERTS, M. A., Norway	*Committee of Board of Trustees*
ALBERT JOSEPH DURGIN, Orono	
CHARLES LESTER JONES, Corinna	
AUGUSTUS WM. GILMAN, Foxcroft	*Commissioner of Agriculture*
EUGENE HARVEY LIBBY, Auburn	*State Grange*
CHARLES S. POPE, Manchester	*State Pomological Society*
RUTILLUS ALDEN, Winthrop	*State Dairymen's Association*
JAMES MONROE BARTLETT, M. S.	*Members of the Station Staff*
LUCIUS HERBERT MERRILL, B. S.	
FREMONT LINCOLN RUSSELL, V. S.	
WELTON MARKS MUNSON, PH. D.	
GILBERT MOTTIER GOWELL, M. S.	
EDITH MARION PATCH, B. S.	
WARNER JACKSON MORSE, M. S.	

ALUMNI ASSOCIATIONS

THE GENERAL ASSOCIATION

President, J. M. Oak, '73, Bangor
Secretary, F. L. Russell, '85, Orono
Corresponding Secretary, R. K. Jones, '86, Orono
Treasurer, A. H. Brown, '90, Oldtown
Necrologist, J. N. Hart, '85, Orono
Alumni Members of the Athletic Association, G. E. Thompson, '91, Orono, E. H. Kelley, '90, Bangor, A. L. Bird, '00, Rockland

The West Maine Association

President, R. W. Eaton, '73, Brunswick
Secretary and Treasurer, A. C. Wescott, '99, 7 Exchange St., Portland

The North Maine Association

President, Harvey B. Thayer, '73, Presque Isle
Secretary, N. H. Martin, '76, Fort Fairfield

The Boston Association

President, Samuel D. Thompson, '01, Wollaston, Mass.
Secretary, Walter N. Cargill, '00, Lynn, Mass.

The New York Association

President, Chas. H. Kilbourne, 2254 Seventh Ave., N. Y. City
Secretary, Ralph Hamlin, 500 Twelfth St., Brooklyn

The Washington (D. C.) Association

President, P. L. Ricker, U. S. Dept. Ag.
Secretary and Treasurer, H. P. Gould, U. S. Dept. Ag.

The Penobscot Valley Association

President, Charles E. Oak, '76, Bangor
Secretary, Frank H. Damon, '95, Bangor

The Western Association

President, G. W. Sturtevant, '81, 1208 Fisher Building, Chicago
First Vice-President, C. W. Rogers, '76, 1896 Aldine Ave., Chicago.
Second Vice-President, M. C. Wiley, '03, 501 Lasalle Ave., Chicago
Secretary and Treasurer, Wm. Webber, '84, 889 Sawyer Ave., Chicago

The Pittsburg Association

President, A. G. Mitchell, '75, 6007 Walnut St.
Vice-President, G. W. Hutchinson, '93, Greensburg, Pa.
Secretary and Treasurer, H. E. Cole, '02, 1023 Park Building

The Schenectady Association

President, J. G. Lurvey, '00, 1206 State St.
Vice-President, C. N. Rackliffe, '02, 1206 State St.
Secretary, H. E. Duren, '02, 306 Lafayette St.
Treasurer, H. F. Hoxie, '99, 940 State St.
Executive Committee, C. W. Bartlett, '01, H. P. Mayo, '99, H. E. Duren, '02

The Kennebec Valley Association

President, D. H. Perkins, '00, Skowhegan
Secretary, E. A. Parker, '04, Skowhegan
Treasurer, Harold Cook, '00, Waterville
Executive Committee, D. W. Colby, '85; Harold Cook, '00; John Steward, '91; D. H. Perkins, '00; John Burleigh, '87
Legislative Committee, Samuel Gould, '77, Wm. T. Haines, '76, Roy Flynt, '04

OFFICERS OF ADMINISTRATION

GEORGE EMORY FELLOWS, President

JAMES NORRIS HART, Dean

JAMES STACY STEVENS, Dean in the College of Arts and Sciences

CHARLES DAYTON WOODS, Director of the Experiment Station

WILLIAM EMANUEL WALZ, Dean in the College of Law

WILLIAM DANIEL HURD, Acting Dean in the College of Agriculture

ELIZABETH ABBOTT BALENTINE, Secretary of the Faculty

*THE FACULTY OF INSTRUCTION AND INVESTIGATION

GEORGE EMORY FELLOWS, Ph. D., L. H. D., LL. D. Campus
President

Professor of History

MERRITT CALDWELL FERNALD, Ph. D., LL. D. 54 Main Street

Professor of Philosophy

ALFRED BELLAMY AUBERT, M. S. 53 Main Street

Professor of Chemistry

†ALLEN ELLINGTON ROGERS, M. A. College Street

Professor of Civics and Constitutional Law

JAMES MONROE BARTLETT, M. S. College Street

Chemist in the Experiment Station

LUCIUS HERBERT MERRILL, B. S. 14 Bennoch Street

Chemist in the Experiment Station

JAMES NORRIS HART, C. E., M. S. College Street

Professor of Mathematics and Astronomy

Dean

FREMONT LINCOLN RUSSELL, B. S., V. S. North Main Street

Professor of Biology, and Veterinarian in the Experiment Station

---

*Arranged in groups in order of seniority of appointment.

†Absent on leave.

WELTON MARKS MUNSON, PH. D. 76 Main Street
Pomologist in the Experiment Station
HORACE MELVYN ESTABROOKE, M. A. 80 Main Street
Professor of English
JAMES STACY STEVENS, M. S. 99 Main Street
Professor of Physics
DEAN IN THE COLLEGE OF ARTS AND SCIENCES
GILBERT MOTTIER GOWELL, M. S. Campus
Professor of Animal Industry. In charge of Poultry Experiments in the Experiment Station
CHARLES DAYTON WOODS, SC. D. 55 Main Street
Director of the Experiment Station
JOHN HOMER HUDDILSTON, PH. D. 105 Main Street
Professor of Greek
WILLIAM EMANUEL WALZ, M. A., LL. B. 183 Cedar St., Bangor
Professor of Law
DEAN IN THE COLLEGE OF LAW
GILMAN ARTHUR DREW, PH. D. College Street
Professor of Biology
WILBUR FISK JACKMAN, B. S., PH. C. 38 Pine Street
Professor of Pharmacy
RALPH KNEELAND JONES, B. S. 26 Bennoch Street
Librarian
WILLIAM DANIEL HURD, B. S. Campus
Professor of Agronomy
ACTING DEAN IN THE COLLEGE OF AGRICULTURE
JACOB BERNARD SEGALL, PH. D. Mill Street
Professor of Romance Languages
HAROLD SHERBURNE BOARDMAN, C. E. 57 Main Street
Professor of Civil Engineering
GEORGE DAVIS CHASE, PH. D. 59 Main Street
Professor of Latin
GORDON EDWIN TOWER, B. S., M. F. College Street
Professor of Forestry
CAROLINE COLVIN, PH. D. Campus
Professor of History
ARTHUR CRAWFORD JEWETT, B. S. Mill Street
Professor of Mechanical Engineering
WALTER KIERSTEAD GANONG, B. SC. 28 Bennoch Street
Professor of Electrical Engineering
CHARLES DAVIDSON, PH. D. College Street
Professor of Education

JOSEPH WILLIAM CARR, PH. D. 47 Main Street
Professor of Germanic Languages

WARNER JACKSON MORSE, M. S. 7 Main Street
Vegetable Pathologist in the Experiment Station

ROBERT JAMES SPRAGUE, PH. D. 47 Main Street
Professor of Economics and Sociology

WALTER STEVENS BROWN, First Lieutenant 10th Infantry Campus
Professor of Military Science and Tactics

EDITH MARION PATCH, B. S. 36 Main Street
Entomologist in the Experiment Station

EDGAR MYRICK SIMPSON, B. A. 5 Broadway, Bangor
Assistant Professor of Law

CHARLES PARTRIDGE WESTON, C. E., M. A. College Street
Assistant Professor of Mechanics and Drawing. (In Charge of the Department)

*GUY ANDREW THOMPSON, M. A. College Street
Assistant Professor of English

MAX CARL GUENTHER LENTZ 12 Mill Street
Assistant Professor of Germanic Languages

ARTHUR WITTER GILBERT, M. S. Campus
Assistant Professor of Agronomy

GEORGE RUFUS WHEELER, M. A. Pine Street
Acting Assistant Professor of English

HERMAN HERBERT HANSON, M. S. 61 Main Street
Assistant Chemist in the Experiment Station

EUGENE LOUIS RAICHE Campus
Instructor in French (Summer Term)

WILLIAM MORTON BARROWS, M. S. 26 Main Street
Instructor in History (Summer Term)

ARCHER LEWIS GROVER, B. S. 14 Mill Street
Instructor in Civil Engineering and Drawing

BERTRAM LEIGH FLETCHER, LL. B. 28 Second Street, Bangor
Instructor in Agency

GEORGE HENRY WORSTER, LL. B. 234 Center Street, Bangor
Instructor in Insurance

---

*Absent on leave.

HENRY MARTIN SHUTE, M. A. 44 Main Street
Instructor in Romance Languages

MARSHALL BAXTER CUMMINGS, M. S. College Street
Instructor in Botany

HARLEY RICHARD WILLARD, M. A. 42 Main Street
Instructor in Mathematics

BARTLETT BROOKS, B. A., LL. B. 10 Columbia Building, Bangor
Instructor in Contracts

RAYMOND KURTZ MORLEY, M. A. 61 Main Street
Instructor in Mathematics

EVERETT WILLARD DAVEE Main Street
Instructor in Wood and Iron Work
Instructor in Chemistry

THOMAS McCHEYNE GUNN, B. S., M. A. 12 Bennoch Street
Instructor in Mechanical Engineering

WALTER EVERETT PRINCE, M. A. 8 Forest Avenue
Instructor in English

WILLIAM ROSS HAM, B. A. 78 North Main Street
Instructor in Physics

PERCY ANDERSON CAMPBELL, M. S. A. Campus
Instructor in Animal Industry

PERCY LORING REYNOLDS, M. D. 78 North Main Street
Physical Director and University Physician

RALPH LOWE SEABURY, B. S. 53 Main Street
Instructor in Biological and Agricultural Chemistry

CHARLES BARTO BROWN, C. E. 5 Forest Avenue
Instructor in Civil Engineering

ELMER EARL MOOTS, B. C. E. Stillwater
Instructor in Mathematics

WINDSOR PRATT DAGGETT, PH. B. Middle Street
Instructor in Public Speaking

HARRY ALVAH EMERY, B. S. College Street
Instructor in Civil Engineering

MAXWELL JAY DORSEY, B. S. 78 North Main Street
Instructor in Horticulture

CHARLES JENKINS CARTER 6 Pine Street
Instructor in the Machine Shop

GUSTAV FREDERICK WITTIG, B. S., E. E. 78 North Main Street
Instructor in Electrical Engineering

ARTHUR CRAIG WHITTIER, B. S. College Street
Assistant Chemist in the Experiment Station

JOANNA CARVER COLCORD, B. S. 26 Main Street
Assistant Chemist in the Experiment Station

FOREST JOHN MARTIN, LL. B. 105 Cumberland Street, Bangor
Resident Lecturer on Common Law Pleading and Maine Practice
HUGO CLARK, C. E. 5 Broadway, Bangor
Resident Lecturer on Equity Pleading and Practice
[illegible] 25 Fifth Street, Bangor
[illegible] Procedure

LOUIS CARVER SOUTHARD, [illegible]
Lecturer on Medico-Legal Relations

FLORENCE BALENTINE, B. A. College Street
Tutor in Biology
HENRY WALTER BEARCE, B. S. Campus
Tutor in Physics

ASSISTANTS AND OTHER OFFICERS

STEPHEN JOHN FARRELL Orono House
Assistant in Physical Training
MAUDE BROWN COLCORD 26 Main Street
Assistant in the Library
DAYTON JAMES EDWARDS, B. S. 88 Main Street
Assistant in Biology
JENNIE ELIZABETH DUNMORE, B. S. College Street
Cataloger in the Library
ANDREW MAYHEW SHAW Park Street
Superintendent of Grounds and Greenhouses
FRANK MORRISON Campus
Foreman of the Farm
HALSEY RICHARDSON WING Campus
Head Janitor

HENRY MARTIN SHUTE, M. A. 44 Main Street
Instructor in Romance Languages

MARSHALL BAXTER CUMMINGS, M. S. College Street
Instructor in Botany

HARLEY RICHARD WILLARD, M. A. 42 Main Street
Instructor in Mathematics

BARTLETT BROOKS [illegible]

MATTHEW HUME BEDFORD, PH. D. 53 Main Street
Instructor in Chemistry

Instructor in Chemistry

THOMAS McCHEYNE GUNN, B. S., M. A. 12 Bennoch Street
Instructor in Mechanical Engineering

WALTER EVERETT PRINCE, M. A. 8 Forest Avenue
Instructor in English

WILLIAM ROSS HAM, B. A. 78 North Main Street
Instructor in Physics

PERCY ANDERSON CAMPBELL, M. S. A. Campus
Instructor in Animal Industry

PERCY LORING REYNOLDS, M. D. 78 North Main Street
Physical Director and University Physician

RALPH LOWE SEABURY, B. S. 53 Main Street
Instructor in Biological and Agricultural Chemistry

CHARLES BARTO BROWN, C. E. 5 Forest Avenue
Instructor in Civil Engineering

ELMER EARL MOOTS, B. C. E. Stillwater
Instructor in Mathematics

WINDSOR PRATT DAGGETT, PH. B. Middle Street
Instructor in Public Speaking

HARRY ALVAH EMERY, B. S. College Street
Instructor in Civil Engineering

MAXWELL JAY DORSEY, B. S. 78 North Main Street
Instructor in Horticulture

CHARLES JENKINS CARTER 6 Pine Street
Instructor in the Machine Shop

GUSTAV FREDERICK WITTIG, B. S., E. E. 78 North Main Street
Instructor in Electrical Engineering

ARTHUR CRAIG WHITTIER, B. S. College Street
Assistant Chemist in the Experiment Station

JOANNA CARVER COLCORD, B. S. 26 Main Street
Assistant Chemist in the Experiment Station

FOREST JOHN MARTIN, LL. B. 105 Cumberland Street, Bangor
Resident Lecturer on Common Law Pleading and Maine Practice
HUGO CLARK, C. E. 5 Broadway, Bangor
Resident Lecturer on Equity Pleading and Practice
CHARLES HAMLIN, M. A. 25 Fifth Street, Bangor
Lecturer on Bankruptcy and Federal Procedure
LUCILIUS ALONZO EMERY, LL. D. Ellsworth
Lecturer on Roman Law and Probate Law
ANDREW PETERS WISWELL, LL. D. Ellsworth
Lecturer on Evidence
LOUIS CARVER SOUTHARD, M. S., LL. D. Boston
Lecturer on Medico-Legal Relations

FLORENCE BALENTINE, B. A. College Street
Tutor in Biology
HENRY WALTER BEARCE, B. S. Campus
Tutor in Physics

ASSISTANTS AND OTHER OFFICERS

STEPHEN JOHN FARRELL Orono House
Assistant in Physical Training
MAUDE BROWN COLCORD 26 Main Street
Assistant in the Library
DAYTON JAMES EDWARDS, B. S. 88 Main Street
Assistant in Biology
JENNIE ELIZABETH DUNMORE, B. S. College Street
Cataloger in the Library
ANDREW MAYHEW SHAW Park Street
Superintendent of Grounds and Greenhouses
FRANK MORRISON Campus
Foreman of the Farm
HALSEY RICHARDSON WING Campus
Head Janitor

GEORGE ABRAHAM COLBURN — Bennoch Street
Head Carpenter

GRACE MARY COLBURN — Bennoch Street
Cashier

OLA HELEN PERRIN — College Street
Stenographer to the President

ANNIE MARIE SNOW — 58 Main Street
Clerk and Stenographer to the Director of the Experiment Station

ADDIE GERTRUDE PRESCOTT — 3 Forest Avenue
Stenographer to the Deans and the Secretary

BLANCHE FOLSOM POOLER — Stillwater Street
Stenographer in the Experiment Station

NELLIE WILKINS LANE — Campus
Matron of the Mt. Vernon House

HENRY ATLEIGH MILLET — Campus
Meteorological Observer in the Experiment Station

WALTER ANDERSON — Campus
Poultryman

ROYDEN LINDSAY HAMMOND — 59 Main Street
Seed Analyst and Photographer in the Experiment Station

*STANDING COMMITTEES OF THE FACULTY

Admission to College

The President, the Deans (sub-committee), Professor Aubert, Professor Carr, Professor Chase, Professor Colvin, Professor Drew, Professor Estabrooke, Professor Huddilston, Professor Segall.

Admission to Examinations

Professor Fernald, Professor Ganong, Professor Weston.

Advanced Degrees

Professor Fernald, Professor Chase, Professor Colvin, Professor Estabrooke, Professor Walz, Professor Weston.

Approved Tutors

Professor Hart, Secretary Balentine.

Athletics

Professor Jones, Professor Boardman, Doctor Reynolds.

---

*The member whose name is printed first is the chairman of the committee.

Bachelor's Degree
Professor Stevens, Professor Colvin, Professor Weston.

Bulletins
Profesor Jones, Professor Merrill, Professor Wheeler.

Catalog
Professor Stevens.

Courses
Professor Drew, Professor Boardman, Professor Hart, Professor Stevens.

Debate
Professor Estabrooke, Professor Colvin, Mr. Daggett, Professor Sprague.

Delinquent Students
Professor Boardman, Mr. Grover, Professor Hurd, Mr. Shute, Mr. Willard.

Entrance Examinations
Professor Stevens.

Fitting Schools
Professor Estabrooke, Professor Chase, Professor Davidson, Professor Fernald, Professor Hart, Professor Huddilston, Professor Stevens.

Health
Doctor Reynolds, Professor Brown, Professor Colvin, Professor Jackman, Professor Russell.

Honors
Professor Stevens, Professor Carr, Professor Drew, Professor Huddilston.

Lectures
Professor Drew, Professor Chase, Professor Segall.

Library
Professor Jones, Professor Colvin, Professor Estabrooke, Professor Jackman.

Military Work
Lieut. Brown, Professor Jewett, Director Woods.

Musical Organizations
Professor Jones, Professor Lentz, Professor Tower.

Press
Professor Jones, Mr. Morley, Professor Wheeler.

Registration
Professor Stevens, Professor Drew, Professor Hart.

Rules
Professor Hart, Professor Stevens, Director Woods.

Summer Term
Professor Stevens.

Student Advisers
For freshmen in all courses: Professor Hart.
For all other students: the heads of the departments in which their major subjects are taken.

Tuition Loans
President Fellows, Professor Estabrooke, Professor Fernald.

The University Council
Faculty Members: President Fellows, Professor Boardman, Professor Hart, Professor Stevens.
Seniors: Mr. Lekberg, Mr. Malloy, Mr. Rounds.
Juniors: Mr. Chase, Mr. Jacobs.

THE UNIVERSITY OF MAINE

ESTABLISHMENT

By an act of Congress, approved July 2, 1862, it was provided that there should be granted to the states, from the public lands, "thirty thousand acres for each Senator and Representative in Congress," from the sale of which there should be established a perpetual fund, "the interest of which shall be inviolably appropriated by each state which may take and claim the benefit of this act, to the endowment, support, and maintenance of at least one college where *the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such manner as the legislatures of the states may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life.*" The act forbade the use of any portion of the principal or interest of this fund for the purchase, erection, or maintenance of buildings and required each state taking the benefit of the provisions of the act "to provide within five years not less than one college" to carry out the purposes of the act.

Maine accepted this grant in 1863, and in 1865 constituted "a body politic and corporate, by the name of the Trustees of the State College of Agriculture and the Mechanic Arts." The trustees were authorized to receive and hold donations, to select the professors and other officers of the college, to establish the conditions for admission, to lay out courses of study, to grant degrees, and to exercise other usual powers and privileges.

The Governor and Council were given the right "to examine into the affairs of the college, and the doings of the trustees, and to inspect all their records and accounts, and the buildings and premises occupied by the college."

It was provided that in addition to the studies especially required by the Act of Congress, the college should teach such other studies as its facilities would permit.

The Legislature of 1897 changed the name of the institution to "The University of Maine."

THE UNIVERSITY OF MAINE

ENDOWMENT AND INCOME

The State of Maine received, under the Act of Congress above referred to, two hundred and ten thousand acres of public land, from which the University has realized an endowment fund of $118,300. This has been increased by a bequest of $100,000 from Abner Coburn of Skowhegan, who was for many years president of the Board of Trustees. The town of Orono contributed $8,000, and the town of Oldtown $3,000, for the purchase of the site on which the buildings stand. The State has appropriated about $350,000 for the material equipment.

Under an Act of Congress approved March 2, 1887, the University receives $15,000 annually for the maintenance of the department known as the Agricultural Experiment Station.

Under an Act of Congress approved August 30, 1890, the University receives $25,000 annually for its more complete endowment and maintenance.

Under an Act of the Legislature, approved March 20, 1897, the University receives $20,000 annually from the State for current expenses.

Under an Act of the Legislature, approved March 8, 1905, the University receives an additional appropriation of $12,000 for each of the two years, 1905 and 1906.

Under an Act approved March 17, 1906, the University receives an appropriation of $5,000 a year for work in the Agricultural Experiment Station. This appropriation will increase by $2,000 a year until it reaches $15,000.

Student fees and miscellaneous receipts complete the income.

LOCATION

The University has a beautiful and healthful location in the town of Orono, Penobscot county, half way between the villages of Orono and Stillwater, three miles from the city of Oldtown, and nine miles from the city of Bangor. The Stillwater river, an arm of the Penobscot, flows in front of the buildings, forming the western boundary of the campus. Orono is upon the Maine Central Railroad and is easy of access from all parts of the state.

The Bangor, Orono, and Oldtown Electric Railroad runs through the University grounds. Visitors may find it convenient to take the electric cars at Bangor, Veazie, or Oldtown, as the electric road does not run

to the railroad station at Orono. Baggage may be sent to Orono by the Maine Central Railroad.

The College of Law is located in the Exchange Building, Bangor, at the corner of Exchange and State streets.

THE BUILDINGS AND THEIR EQUIPMENT

Oak Hall.—In the northern part of the campus is Oak Hall, a substantial four-story brick building used as a dormitory for men, named in honor of Lyndon Oak of Garland, for many years a useful member of the board of trustees. It contains forty-nine study rooms for students, and is supplied with bath rooms. It is heated by steam, supplied with water, and lighted by electricity. An annex added during the summer of 1903 furnishes accommodations for thirty students more.

Fernald Hall.—This building, named in honor of Merritt C. Fernald, LL. D., president of the University from 1879 to 1893, is a two-story brick building. It contains fifteen rooms devoted to the departments of chemistry and pharmacy. On the first floor are the quantitative and pharmaceutical laboratories, with offices and private laboratories for the professors of chemistry and pharmacy; upon the second floor are lecture rooms, the qualitative laboratory, the office and private laboratory of the instructor in qualitative analysis, a store room, and a recitation room. Under the roof are arranged the mineralogical laboratory, and dark rooms. In the basement is an assay laboratory, a laboratory for water analysis, a room for organic preparations, and store rooms.

Coburn Hall.—Directly south of Fernald Hall is Coburn Hall, named in honor of Abner Coburn of Skowhegan, the chief benefactor of the University. It is a brick building, three stories in height. In the basement and on the first floor are located the college store, four recitation rooms, and part of the museum. On the second floor are the botanical and zoölogical laboratories, recitation rooms for the departments of biology, English, and modern languages, and the remainder of the museum. On the third floor are recitation rooms for the departments of civics, philosophy, and modern languages, the modern language seminary room, and the psychological laboratory.

Wingate Hall.—One of the most conspicuous buildings on the campus, Wingate Hall, named in honor of William P. Wingate of Bangor, long an honored member of the board of trustees, is a three-story brick structure, rectangular in form, with a handsome clock tower.

It was erected for the departments of civil and mechanical engineering, but is at present occupied chiefly by the departments of civil engineering, physics, and mechanics and drawing. On the ground floor are four recitation rooms, instrument rooms, an optical room, and the offices of the professors of civil engineering, and mechanics and drawing. On the second floor are the offices and recitation rooms of the professors of physics, Greek, and Latin, two physical laboratories, and the physical apparatus rooms. On the third floor are two large, well lighted drawing rooms for the use of the departments of civil engineering and mechanics and drawing, and a filing room containing a collection of blue prints belonging to the department of civil engineering. In the basement are the electrical laboratory and the photometer room of the department of physics, and the cement testing laboratory. On the fourth floor is another photometer room for the use of students in physics.

Alumni Hall.—To the northeast of Coburn Hall stands Alumni Hall, erected in 1900. The front part contains on the ground floor the offices of the president, secretary, and cashier, a board room, two recitation rooms for the use of the military and mathematical departments, and the office of the professor of mathematics; the second floor contains the university chapel with a large pipe organ in the choir gallery. In the basement under the drill hall are the offices of the military instructor and the physical director, the baseball cage, lockers, lavatories, rooms for storage, etc. The dimensions of the drill hall and gymnasium are 100 by 62 feet. This room is encircled by a 9-foot running track suspended from the roof. As a gymnasium it is equipped with complete apparatus of the most approved kind.

The Observatory.—The astronomical observatory stands upon a slight elevation to the east of Coburn Hall. The equatorial room is equipped with an eight-inch refractor of the best modern construction, with finding circles, driving-clock, filar micrometer and other accessories. In the transit-room is a Repsold vertical circle of two-inch aperture. These instruments, together with sextants, sidereal chronometer, etc., furnish excellent facilities for instruction in both descriptive and practical astronomy.

Lord Hall.—This building is designed for the departments of mechanical and electrical engineering. It consists of a main part 82 x 56 feet in dimensions and two stories in height, and an ell 125 x 42 feet partly of two stories and partly of one story. It contains three recitation rooms, a large drawing room, the shops, suitable laboratories, and

offices for the professors and instructors in the two departments concerned. The mechanical laboratory contains a Riehle testing machine of 60,000 pounds capacity; an oil testing machine manufactured by Tinius, Olsen & Co., of Philadelphia, and other oil testing apparatus; by Tinius, Olsen & Co., of Philadelphia, and other oil testing apparatus; belt testing apparatus, steam separators, calorimeters, and injectors. The hydraulic laboratory in the basement contains steam pumps for testing, a pressure tank, and other apparatus for experimenting in the flow of water in pipes, weir measurements, etc. The forge room is newly equipped with down draft forges, manufactured by the B. F. Sturtevant Co., of Boston. The dynamo laboratory is provided with six direct-current dynamos, two alternating-current dynamos, a rotary converter, transformer, ammeters, voltmeters, wattmeters, rheostats, switches, etc., affording accommodations for fifteen students in a section. In the third story are located some of the recitation rooms and offices used by the department of agriculture and the agricultural extension work.

Holmes Hall.—This is a two-story brick building, 81 x 48 feet, standing south of Alumni Hall. It is occupied by the Maine Agricultural Experiment Station and is arranged as follows:

On the ground floor are four large chemical laboratories used in the analysis of foods, feeding stuffs, and fertilizers; the laboratory for vegetable pathology; and the office of the veterinarian. The general office and mailing room, the director's office, the laboratory for seed testing and photography, the entomological laboratory, and the pomological laboratory are on the second floor.

In the basement are rooms for the boiler, for the gas machine, for the grinding and preparation of samples, for the calorimeter, and a kitchen used in the experiments upon the food of man, and rooms for the storage of fuel, chemicals, and glass ware. The large attic is used for the storage of samples and supplies. With the exception of the thermometers and rain gauge, the meteorological apparatus is in this building. The building is heated by steam, supplied with gas and electricity, and is thoroughly equipped with apparatus for the work of agricultural investigation.

Library.—The library, completed in 1906, is the most striking building on the campus. For its erection and furnishing the sum of $55,000 was given, without conditions, by Mr. Andrew Carnegie. The exterior is of Hallowell granite, in the price of which a generous concession was made by the Hallowell Granite Works. The stacks were erected by A. D.

Houghton, class of 1887, and L. G. Paine, class of 1885, at a cost some thousands of dollars below the market price.

The building is two stories above a basement which is almost entirely above the ground level. The stacks are in the rear of the main building, and have a capacity of 75,000 volumes, with a cataloging room on the first floor, opening from the librarian's office. The first floor of the main building contains an entrance hall, open to the dome; on one side is a periodical room in the rear of which is a room for reserved books, and on the other is a reference room from which the librarian's office leads; there is a women's room on this floor. The second floor has a gallery surrounding a central open space, and on its walls, and in the entrance hall below, are the interesting collections of the University Guild; on this floor also are a lecture hall, with a seating capacity of over one hundred, and five seminar rooms. The basement contains a newspaper room, a club room in which meetings of the various student organizations may be held, janitor's room, store room, and men's room.

The library is heated by steam and lighted by electricity, and is thoroughly ventilated. Each floor of the stacks and each seminar room is connected by an intercommunicating telephone system with the librarian's office, the assistant's desk, and the janitor's room, and the librarian's office has telephone connection with the University branch exchange so that it may be reached by telephone from any of the other University buildings.

The Power House.—A wooden building, 30 x 56 feet, just north of Alumni Hall, contains two boilers, of one hundred and fifty, and one hundred horse power, respectively, a fifty horse power Corliss engine, a fifteen horse power Otto gasoline engine, and the dynamos, which comprise the lighting plant. Students in the electrical engineering course receive instruction in the care and running of this equipment.

The Horticultural Building.—The greenhouses, offices, and laboratories for horticultural work lie just east of Holmes Hall. The greenhouses cover about 4000 square feet of surface, are heated with hot water, and furnish ample opportunity for the demonstration of the practical culture of flowers and vegetables under glass. In this building is an herbarium of economic plants, which is of increasing interest and value.

The Dairy Building.—The Dairy Building, 50 x 42 feet, contains a milk room, a butter room, a cheese room, a cold storage room, a cheese curing room, a lecture room, the office of the professor of animal industry, and a laboratory. It is supplied with all necessary appliances for teaching the most approved methods of handling milk, cream, butter,

and cheese. The building is heated with steam and supplied with hot and cold water. Power is furnished by a six horse power engine.

The Farm Buildings.—The lower barn, 100 x 50 feet, contains a modern tie-up with 26 stalls, two grain rooms, two bull rooms, nursery, calf room, and silo, and has storage capacity for 150 tons of hay and 100 tons of silage. The upper barn, 100 x 40 feet, contains a class room for instruction in stock judging, stalls and pens for digestion experiments, rooms for grain and storage, scales for weighing animals, an electric motor for power, and a mill for grinding. The barns are lighted by electricity and supplied with water and steam. The basements of the barns contain storage rooms for manure and roots, and pens for swine. The sheep barn, 125 x 20 feet, is of special design and contains six large pens, a nursery, and a storage room. The poultry plant consists of an incubator house, 31 x 31 feet, a warmed breeding house 150 x 15 feet, two curtain front houses, 150 x 14 feet, and 120 x 16 feet. These houses accommodate 1,000 mature birds. There are also detached brooder houses capable of caring for 2,500 chicks. Two tool houses furnish about 10,000 square feet of floor room for the storage of wagons and farm machinery.

The Mt. Vernon House.—This is a wooden building, completed in 1898, which provides dormitory accommodations for women. It is situated near the recitation and laboratory buildings, upon a site overlooking the campus and commanding a beautiful view of the river, villages, and mountains. It is two stories in height, built in the old colonial style, and consists of a long central portion and two wings. It contains a parlor, dining room, kitchen, bath room, and sixteen study rooms, each intended for two students. The rooms are large, well lighted, heated by a combined system of hot air and hot water, and provided with electric lights. A special feature is the long hall on each floor, extending sixty-six feet upon the front of the building, and wide enough to serve as an assembly or study room. The building, and the students who live in it, are under the supervision of a competent matron.

The Fraternity Houses.—Eight of the student fraternities occupy club houses. Six of the houses are on the campus, and two in the village of Orono. They are large, well arranged houses, affording rooms for about twenty-five students each. Several of the fraternities maintain their own boarding establishments under the supervision of matrons.

The Infirmary.—A small wooden building has recently been erected on the back campus, to be used in caring for any cases of infectious disease that might appear among the students. It contains a ward for women, as well as one for men, with sanitary, comfortable, and convenient equipment for patients.

Other Buildings.—In addition to the buildings already described, there are several others devoted to various purposes. Among these are the President's house, the Commons or general boarding house, and three residences occupied by members of the faculty.

The Athletic Field.—Alumni Field, so called because funds required for its construction were contributed by the Alumni Association, is located at the northwestern extremity of the campus, about 1,200 feet from the Gymnasium. It contains a quarter-mile cinder track, with a 220-yard straightaway, and is graded and laid out for foot-ball, base-ball, and field athletics.

THE LIBRARY

The library contains twenty-nine thousand bound volumes and eight thousand pamphlets. Some fifteen hundred volumes of special value to the Experiment Station are kept in the Station building, and nearly three thousand law books, in the College of Law. Reference libraries are maintained in departmental rooms by those departments which require them.

More than half the volumes in the library have been added within the last few years. Accessions average about 2,500 annually, and the greater part of these are acquired by purchase. In large part purchases are made of books selected by heads of departments, and this method results in a collection of great working value.

The library is classified according to the Dewey system, slightly modified; there is a card catalog, arranged by authors and subjects; access to the shelves is entirely unrestricted. Students may borrow three volumes at a time, to be retained three weeks, when they may be renewed, unless previously called for; special permission to borrow a larger number may be obtained, when necessary, upon application to the librarian; there is a fine of two cents a day for books kept overtime. Officers and alumni of the University may borrow any reasonable number of volumes without time limit, except that all books must be returned at least nine days before Commencement, and the return of any volume may be required at any time by the library committee. Other responsible per-

sons may obtain the privileges of the library upon application to the librarian. The librarian and his assistants are glad to give advice and assistance at any time.

During the fall term of each year a series of three lectures is given by the librarian upon the following subjects, The Library and Its Use, Classification and the Catalog, and Reference Books and Their Use. Attendance upon these is required of freshmen, special students, and others in their first year at the University, with the purpose of giving them some idea of the opportunities the library offers them and suggestions that will aid them in its use.

The librarian also offers an elective course in the spring term, on bibliography, the development of books and libraries, and the principles of library administration. This course consists of lectures, with collateral reference work, one hour a week, and may count for credit towards graduation.

The library is a designated depository for the publications of the United States Congress, and also receives publications of different departments not included in the depository set. All the publications of the State of Maine are received. Through the courtesy of the late Hon. L. D. Carver, State Librarian, public documents of a number of other states are received, in accordance with a series of duplicate exchanges arranged by him.

Over three hundred and fifty of the most important literary, scientific, and technical periodicals, both American and foreign, are regularly received. The leading papers of Maine, together with a selected list of daily papers published in the large cities, are on file.

The library is open daily from 8.00 A. M. to 12.00 M., and from 1.30 to 5.30, and from 7.00 to 9.30 P. M., Sundays and legal holidays excepted. On Sunday it is open from 2.00 to 5.000 P. M. During the vacations it is open from 9.00 A. M. to 12.00 M. and from 2 P. M. to 5 P. M. each week day, except Saturday, when it is open in the forenoon only.

MUSEUM OF NATURAL HISTORY

The museum is located in the wing of Coburn Hall and in an adjoining room in the main part of the building and consists of geological, zoological, and botanical collections.

The geological collections embrace the L. H. Merrill collection of illustrative rocks, a general collection of the more important fragmental, crystalline, and volcanic rocks, a collection of the more important building stones, a general collection of the more common minerals, a collection of economic minerals furnished by the National Museum, an

educational series of rocks furnished by the U. S. Geological Survey, and a small collection of plant and animal fossils.

The zoölogical collections comprise a number of the larger mammals of the State, a small set of exotic mammals, a more complete working collection of native birds, illustrative collections of the other groups of vertebrates, a rather large set of the shells of native and exotic molluscs, and illustrative collections of the other groups, dry, alcoholic, and prepared as microscopic objects.

The most important collection in the herbarium was presented to the University by Mr. Jonathan G. Clark, of Bangor. This is the collection made by the late Rev. Joseph Blake, and includes more than 7,000 species of both flowering and flowerless plants. It represents more especially the flora of Maine and other New England States, but includes many forms from the western United States, Mexico, and the West Indies, and a number from many of the European and Asiatic countries, and from Africa and Australia.

The late Professor Harvey left to the herbarium the general collections accumulated during his connection with the University, and his special collection of the weeds and forage plants of Maine, comprising 300 species. Other important collections are Collins's algae of the Maine coast, Halsted's lichens of New England, Halsted's weeds, Ellis and Everhard's North American fungi, Cook's illustrative fungi, Underwood's hepaticæ, Cummings and Semour's North American lichens, and a collection of economic seeds prepared by the U. S. Department of Agriculture.

ORGANIZATIONS

The following is a list of organizations existing in the University: The Philological Club, the Deutscher Verein, the University Guild, the Debating Society, the Electrical and Mechanical Society, the Civil Engineering Society, the Agricultural Society, the Chemical Society, the Literati, the Debating Club, the Phi Kappa Phi (honorary), the Young Men's Christian Association, the Athletic Association, the Glee Club, the Instrumental Club, the Band.

The Philological Club.—The Philological Club meets on the first Monday evening of each month except January, during the academic year, for the presentation and discussion of original papers on philological and literary subjects.

The University Guild.—The University Guild has for its object the building up of an art collection, and the promotion of a general interest

among the faculty, students, and friends of the University, in the study of the fine arts. The Guild occupies rooms in the library and holds meetings occasionally during the year. As rapidly as funds permit, casts and photographs of celebrated works of art are being added to the collection already begun.

The course in the history of Italian painting is open to members of the Guild.

Junior Electrical and Mechanical Society.—The Junior Electrical and Mechanical Society aims to unite the interests of the electrical and mechanical students and to keep its members in touch with the practical side of engineering. The society meets each week when topics of practical interest are explained and discussed. All juniors in electrical or mechanical engineering are eligible to membership, and seniors are honorary members.

The Literati.—This is an organization in the College of Arts and Sciences for the promotion of the literary, dramatic, and musical interests of the University.

Phi Kappa Phi.—The Phi Kappa Phi is an honorary society. At the end of the fall term of the senior year the five members of the class having the highest standing are elected members, and at the end of the year the five next highest in the collegiate department, and two from the College of Law, are added.

The Young Men's Christian Association.—The Young Men's Christian Association, composed of students, has for its object the promotion of Christian fellowship and aggressive Christian work. Religious services are held in the Art Museum, and classes for the study of the Bible are conducted on Sunday. This association is a branch of the national Young Men's Christian Association.

UNIVERSITY PUBLICATIONS

The Annual Catalog of the University of Maine.—This contains descriptions of the courses of study, lists of the trustees, faculty, and students, and other information relating to the University.

The Annual Report of the Trustees, President, and Treasurer, to the Governor and Council of the State.—The report of the trustees

and president includes an account of the general affairs and interests of the University for the year, and the report of the Experiment Station. The report for the odd years contains the biennial catalog of graduates.

The University of Maine Studies.—These are occasional publications containing reports of investigations or researches made by university officers or alumni. The following have been issued:

1. The Effect of Magnetization upon the Elasticity of Rods. J. S. Stevens.
2. The Life History of the Nucula Delphinodonta (Mighels). G. A. Drew.
3. A Preliminary List of Maine Fungi. P. L. Ricker.
4. A Catalog and Bibliography of the Odonata of Maine. F. L. Harvey.
5. A Study of the Physiographic Ecology of Mount Ktaadn, Maine. L. H. Harvey.
6. The Habits, Anatomy, and Embryology of the Giant Scallop (Pecten tenuicostatus, Mighels). G. A. Drew.

The University Circulars.—These are occasional pamphlets, issued for special purposes. Those now ready for distribution relate to the Classical Course, the Courses in Agriculture, the Courses in Pharmacy, the College of law, the college of Arts and Sciences, the Courses in Engineering, Student Expenses.

The Maine Bulletin.—This is a publication issued monthly during the academic year, to give information to the alumni and the general public.

The Annual Report of the Experiment Station and the Experiment Station Bulletins.—These give complete results of the work of the station.

The Maine Campus.—This is a journal published weekly during the academic year by an association of the students.

The Prism.—This is an illustrated annual, published by the junior class.

The Blue Book.—This is a literary magazine published monthly by the students.

MILITARY INSTRUCTION

Military instruction is required by law. The department is under the charge of an officer of the regular army, detailed by the President of the United States for this purpose. Cadet rifles, ammunition, and accoutrements are furnished by the War Department. The course has special reference to the duties of officers of the line. The students are organized into an infantry battalion of three companies, officered by cadets selected for character, soldierly bearing, and military efficiency. The corps is instructed and disciplined in accordance with rules established by the President of the United States. These rules include the minimum course of instruction that must be covered, and the minimum time that must be devoted to this instruction.

The uniform prescribed by the board of trustees is as follows:

For cadets, a dark blue blouse, cut military academy style, braided with black braid and without other ornament than the word MAINE embroidered in gold on each side of the collar; light blue trousers with dark stripe and blue cap, old army pattern; for commissioned officers, the old regulation dress uniform prescribed for infantry officers of the United States Army; for non-commissioned officers, the same uniform as for privates, with the addition of gilt chevrons on arms of blouse. The total cost of uniforms is $14.35. The uniforms are procured through an authorized tailor, and are made in the best manner, of thoroughly good material. Cadets are required to wear the uniform when on military duty, and may wear the same at other times.

The three seniors who attain the highest standing in the military department are reported to the military secretary to the U. S. Army, and their names are printed in the U. S. Army Register. Cadets who have satisfactorily completed the course in military science receive at graduation a certificate of military proficiency and are reported to the Adjutant General of Maine.

Service in the military department is required as follows:

All students physically qualified are required to take one year's military work during their first year at the University, except that those admitted to advanced standing may elect other work equal to one credit. One credit is allowed for this work. Those physically disqualified are required to elect other work equal to one credit in lieu of military work. Graduation requirements include one year's military work, or a substitute under the above conditions. No fractional credit for military work will count towards graduation. Military instruction is arranged in a four years' course. After the freshman year the work in this department is elective. Students in the College of Law, the School Course

in Agriculture, and the Short Course in Pharmacy, are excused from military work.

The grades and relative rank of officers and non-commissioned officers will be determined by the professor, subject to the approval of the president.

PHYSICAL TRAINING

All students have the opportunity of taking a systematic course in physical training. The athletic field is situated a short distance from the gymnasium; it has a quarter-mile running track with a 220-yard straightaway and is graded and laid out for foot-ball, base-ball, and track athletics. Here the men may exercise for recreation or train for active competition. There are several tennis courts on the university campus. On the Stillwater river canoeing may be enjoyed and hockey in the winter.

The gymnasium affords excellent opportunity for physical training. On the first floor are the main offices, the office of the physical director, the base-ball cage, lockers, bath-rooms, and toilet rooms. The gymnasium proper is located on the second floor. There is a floor space of 6,550 square feet and an overhead running track. This is supplied with an equipment of modern apparatus for heavy and light gymnastic work. Every student taking physical training must first submit to a physical examination. Measurements are taken and recorded on anthropometric charts and the results are plotted and given in the "Gymnasium Hand Book," for future reference.

As the student life is of necessity sedentary the average man is given hygienic and recreative work; those who have deformities, either of the muscular or skeletal systems, are given the proper corrective work, and those who are sufficiently vigorous may become candidates for the various athletic teams. As the work in this department is elective an effort is made to make the exercises as attractive as possible, as much of their neural value depends upon this.

All students exercising at class hours are expected to wear the regulation suit, which consists of white shirt, white running pants, black stockings, and white rubber-sole shoes.

From December 1 to April 1 gymnasium exercises adapted to the whole student body is carried on. The end sought is organic vigor and the class work given will aim to strengthen the heart, lungs, and other vital organs.

All of the physical training is in charge of the university physician, from whom students may receive medical attention. For the first con-

sultation no charge is made; for subsequent consultations the regular physician's fee is to be paid.

PUBLIC WORSHIP

Short religious services are held in the chapel every day except Saturday and Sunday. All undergraduate students are required to be present. Students receive a cordial welcome at all services in the churches of the village. Voluntary religious services, under the direction of the Young Men's Christian Association, are held weekly. The Day of Prayer for Colleges is observed with appropriate exercises.

GENERAL REGULATIONS

The regulations in regard to the selection of studies, standings and grades, absences from recitations and examinations, entrance conditions, leave of absence, attendance upon chapel, penalties, examinations, and athletics, are printed in a small pamphlet, which may be obtained from the secretary.

By these regulations, the quota of regular studies for each student varies from a minimum of fourteen hours, to a maximum of twenty-two hours of class room work each week. In the application of this rule, two hours of laboratory work, or of other exercises not requiring preparation, count as one hour.

Excuses for absence from individual exercises are not required. Each student is expected to be present at all recitations and other exercises except when imperative reasons require absence. Of these reasons he is the judge; but a student who is absent from ten per cent. or more of the exercises in any study is not admitted to the final examination except by vote of the faculty committee governing these cases. A student who fails to pass at an examination, is absent from an examination, or is excluded from an examination, may make up his deficiency at the special examinations held at the times noted in the calendar. The arrearage examinations during the Christmas recess include only studies of the spring term; the examinations during the spring recess include only studies of the fall term; the examinations at the beginning of the fall term include all the studies of the year. A student who fails to make up an arrearage in a required subject before the study is again taken in class is required to attend recitations in that study, or make up the work under a tutor selected by the faculty.

Each student is given a report of his work shortly after the close of each term. Parents or guardians may obtain these reports upon application to the secretary. The passing rank in all subjects is seventy per cent.

SCHOLARSHIP HONORS

Honors for scholarship are of two kinds, general and special. General honors are awarded, at graduation, to students who attain an average standing, after the freshman year, of ninety on a scale of one hundred. Special honors are granted for the satisfactory completion of an honor course in addition to the work required for a degree. An honor course must involve at least ninety recitations or an equivalent, and be completed in one year. The methods of work are determined by the instructor, who should be consulted in each case by students desiring to take such a course. Honor courses are open to juniors and seniors who have attained an average standing of eighty per cent. in all previous work, and an average standing of ninety per cent. in all previous work of the department in which the honors are sought. A student may not register for an honor course later than the fourth week of the fall term. Upon the completion of a course, the student's work will be tested by an examination or thesis, or both, under the direction of the faculty committee on honors, and the result, together with the instructor's report, will be laid before the faculty. Examinations for honors shall be held at such times and places as the committee on honors may appoint. They shall be distinct from any class examinations in the same course, which latter examinations the candidate for honors may or may not take, as he chooses. The honor examination shall be written and, if the committee so desires, also oral. The professors giving the courses shall submit to the committee, papers for the honor examinations not later than one week before the date set for the examinations.

The students in honor courses involving laboratory or drawing-room work may be tested by examination, or thesis, or both, at the discretion of the committee. The note books kept in such work shall be submitted to the committee and may take the place of a thesis in case they show practically the whole work of the course. The faculty may grant special honors to those students who receive the approval of the committee, but shall not do so if the general work is unsatisfactory. Honors, and their nature, are stated upon the Commencement program and published in the annual catalog.

The fifteen of the highest rank in the senior class are authorized to prepare commencement parts; these parts must be submitted to a com-

mittee by the close of the spring recess, and from the parts submitted, a certain number are selected by the committee. These parts must be prepared for delivery to the satisfaction of a representative of the faculty.

DEGREES

Bachelors' Degrees

The degree of Bachelor of Arts (B. A.) is conferred upon students who have included in their course one year's work in either Latin or Greek.

The degree of Bachelor of Science (B. S.) is conferred upon students who complete the Chemical, Agricultural, Civil Engineering, Mechanical Engineering, Electrical Engineering, Mining Engineering, Forestry, or Pharmacy Course; or who have completed a general course with major work in some one department. The diploma indicates which course has been completed.

The degree of Pharmaceutical Chemist (Ph. C.) is conferred upon students who complete the Short Pharmacy Course.

The degree of Bachelor of Laws (LL. B.) is conferred upon students who complete the Law Course.

In order to receive degrees at Commencement, candidates must have completed by the close of the spring recess, at least seven-eighths of all the work required for graduation, with the exception of arrearage courses repeated in class during the spring term of the senior year.

In case of failure to pass in any spring term study, a student shall be given only one special examination before Commencement, and this shall not be later than the Friday preceding Commencement.

Theses required from candidates for the degree of B. S. must be completed to the satisfaction of the major instructor and deposited in the library, accompanied by the binding fee, not later than twelve o'clock (noon), nine days preceding Commencement. They shall be printed or typewritten, unless the subject matter prevents, on paper of good quality, 8 inches by 10½ inches, with not less than one inch margin on inner edge and half-inch margin on outer edges. They shall be bound in black leather with title on first cover. Drawings accompanying a thesis may be folded and bound with the thesis or placed in a pocket on the third page of the cover; or, if too many for this, they may be bound separately. in size to suit the drawings.

Candidates for degrees who fail to meet these requirements will not be awarded their degrees, and their names will not appear on the Commencement program. A minimum residence of one year is required for the attainment of any bachelor's degree.

Advanced Degrees

For receiving an advanced degree the required preparation must include the attainment of the proper first degree.

The Masters' degrees, viz., Master of Arts (M. A.), Master of Science (M. S.), and Master of Laws (LL. M.), are conferred upon holders of the corresponding Bachelor's degrees under either of the following conditions:

(1) One year's work in residence, of a minimum amount equal to not less than six credits (see page 48), including examnations on a prescribed course of study in a major subject and not more than two minor subjects, and the presentation of a satisfactory thesis. In special cases all the work may be done in one department. The course for each candidate must be approved by the committee on advanced degrees not later than the first week in October. A registration fee of $5.00 is charged, and an additional fee of $15.00 for examinations and diploma is payable upon the completion of the work. Theses must be submitted not later than May 20. The same regulations regarding size and style of binding, outlined under the bachelor's degree, apply here.

(2) Two years' work in absence, with examinations at the University, the other conditions as in (1).

The professional degrees of Civil Engineer (C. E.), Mechanical Engineer (M. E.), and Electrical Engineer (E. E.), may be conferred upon graduates of the Civil Engineering, Mechanical Engineering, and Electrical Engineering Courses respectively, upon the presentation of a satisfactory thesis after at least three years of professional work subsequent to graduation. A fee of $10.00 is required, payable upon presentation of the thesis, which must be submitted not later than May 20. Candidates are expected to be present in person to receive their degrees.

STUDENT EXPENSES

Many students go through college with an annual expenditure of little more than $200, exclusive of the expense of clothing, traveling, and vacation, and very many earn a part of this sum by vacation work. An estimate of the necessary annual expenses of a student in any department, except the College of Law, may be made from the following table. For the expenses of students in the College of Law reference is made to the article on that College. It should be noticed that clothing, traveling, vacation, society, and personal expenses are not included in the table. These vary according to individual tastes and habits. The table is made up for men students who room in Oak Hall and board at the Commons.

The necessary expenses of other students are sometimes lower, but usually slightly higher. In all cases an allowance must be made for personal incidental expenses.

ANNUAL STUDENT EXPENSES

Tuition, 2 terms at $15.00 or $20.00	$30.00 or	$40 00
Registration fee, 2 terms at $5.00		10 00
Incidentals, 2 terms at $10.00		20 00
Laboratory fees, (average) about		10 00
Text-books, about		15 00
Board, 36 weeks at $3.00 or $3.50	108.00 or	126 00
Heat and light for half room, and general care of dormitory		27 00
Total	$220.00 or	248 00

The tuition charge is $15.00 a term, or $30.00 a year, and all students are subject to this charge except those in the courses in agriculture, for none of which is any *tuition* charge made, but incidental and registration fees are the same as in other courses. Residents of Maine who need assistance and maintain a good record may obtain, from the University, loans to cover the tuition charge. The regulations in regard to these loans are stated on page 37.

Students who are not residents of the State of Maine are charged an annual tuition of $40.00.

The registration fee of $5.00 must be paid at the beginning of each term before the student enters any classes.

The incidental fee is $10.00 a term, or $20.00 a year, and covers heat and light for public buildings, reading-room charges, care of public rooms, and miscellaneous expenses.

A student obliged to leave the University within two weeks after the beginning of the term may have the foregoing amounts refunded with the exception of the registration fee. A student leaving within the first half of the term receives a rebate of one-half the incidental expenses. No other rebate is made.

The cost of text-books will average about $15.00 a year for the course. These may be bought at the college store. The expense may be decreased by buying second-hand books and selling them after using them.

Students in the laboratories and shops pay certain charges to cover the cost of materials and maintenance. These charges are as follows:

chemistry, per term, about $3.00; bacteriology, per course, $3.00; physics, per course, $2.50 to $4.00; pharmacy, per term, about $3.50; mineralogy, $2.00; biology, per course, $1.00 to $3.00; electrical engineering, per course, $2.50; mechanical engineering, per course, $2.00; shop, per course, $4.00 to $5.00. Laboratory charges in the civil engineering course are very few, but traveling expenses incurred in visiting engineering works will be nearly equivalent to the laboratory expenses of other courses.

The largest item of expense is board. At the Commons, the university boarding house, the price is about $3.00 a week. Board may be obtained in clubs or private families at prices ranging from $2.50 to $3.50 a week.

The charge for rooms in Oak Hall is seventy-five cents a week for each student, when two occupy a room. This pays for heat and light, and for the lighting and care of the halls and public rooms of the dormitory. Furnished rooms, with light and heat, may be obtained in the village for $1.50 a week if occupied by one person, or $2.00 a week if occupied by two persons.

Women students who do not live at their own homes are required to room and board at the Mt. Vernon House. The price of board is $3.00 a week. For heat and light, and for the care of the public rooms, the charge is seventy-five cents a week.

Students in the dormitories supply their own furniture with the exception of a cot bed. Those desiring rooms in Oak Hall or Mt. Vernon House should make early application to the secretary, as the accommodations are limited.

Each student is required to deposit with the treasurer a bond, with two good names as sureties, in the amount of $150.00, to cover term bills. Blanks on which bonds should be made out will be furnished by the secretary upon application. Those who keep a sufficient deposit with the treasurer to cover the bills of one term will not be required to furnish a bond. The deposit required is $90.00 from those who board at the Commons, or Mt. Vernon House, and $30.00 from others. This deposit is in addition to the registration fee, and must be paid at the beginning of each term. No student will be graduated who is in debt to the treasury.

A circular containing a fuller statement in regard to expenses, and treating of the opportunities for self-help, may be obtained upon application.

LOANS

Tuition Loans

Residents of Maine who need assistance and maintain a satisfactory record may borrow from the university treasury a sum sufficient to pay the tuition charge. This privilege is not extended to students in the College of Law.

Borrowers are required to give notes with satisfactory endorsement. The loans bear interest at six per cent. per annum, and are due at the rate of $30.00 a year, beginning with the first year after graduation, but may be paid earlier. No member of the faculty is accepted as an endorser.

Loans are granted by a committee consisting of the president and two other members of the faculty. The number of loans may not exceed one-third of the number of students in the undergraduate departments. Loans are granted to cover the tuition charges of one year at a time.

The first grant of loans for each university year is made in the preceding June. Applications for loans are considered during May, and to insure attention at this time should be forwarded to the President not later than May 15. A second award is made in the fall term. Applications should be made not later than October 10. They must be made to the President upon blanks to be obtained from the Secretary of the faculty. Awards made in June may be withdrawn from students who do not register, or claim their loans, by October 10.

The Kittredge Loan Fund

This fund, amounting to nearly one thousand dollars, was established by Nehemiah Kittredge, of Bangor. It is in the control of the President and Treasurer of the University, by whom it is loaned to needy students in the three upper classes. In the deed of gift it was prescribed that no security, but personal notes bearing interest at the prevailing rate should be required. Loans are made on the conditions that the interest shall be paid promptly, and that the principal shall be returned from the first earnings after graduation.

SCHOLARSHIPS AND PRIZES

The Kidder Scholarship, thirty dollars, was endowed by Frank E. Kidder, Ph. D., Denver, Colorado, a graduate of the University, of the class of 1879, and is awarded to a member of the junior class to be selected by the President and the faculty.

The Western Alumni Association Scholarship, tuition for the sophomore year, will be awarded to that student taking a regular course, whose deportment is satisfactory, and who shall make the best progress in all studies during his freshman year.

The Junior Exhibition Prize, fifteen dollars, will be awarded to that member of the junior class who shall present the best oration at the junior exhibition. In the award of this prize both the composition and the delivery of the oration will be considered.

The Sophomore Declamation Prize, fifteen dollars, for excellence in elocution, will be awarded to the best speaker in the sophomore class.

The Walter Balentine Prize, fifteen dollars, the gift of Whitman H. Jordan, Sc. D., Geneva, N. Y., a graduate of the University, of the class of 1875, will be awarded to that member of the junior class who shall excel in biological chemistry.

The Kennebec County Prize, twenty-five dollars, the gift of Hon. William T. Haines, Waterville, a graduate of the University, of the class of 1876, will be awarded to that member of the senior class who shall write the best essay on applied electricity.

The Franklin Danforth Prize, ten dollars, the gift of the Hon. Edward F. Danforth, Skowhegan, a graduate of the University, of the class of 1877, in memory of his father, Franklin Danforth, will be awarded to that member of the senior class in the agricultural course who shall attain the highest standing.

The Pharmacy Prize will be awarded to that student in the pharmacy department who shall attain the highest standing in chemistry in the last year of his course.

The Holt Prizes, the gift of Erastus Eugene Holt, A. M., M. D., LL. D., of Portland, will be given to the three students of the class of 1908 who show the greatest improvement in their rating. The rating will be determined from deductions made from the gymnasium and class records of the students at the beginning and end of their college course by the mathematical formula for the normal earning ability of the body, devised by Dr. Holt.

The Boston Alumni Association Scholarship, thirty dollars, will be awarded to that member of the junior class who shall make the most satisfactory progress in all studies during the junior year, and whose deportment is satisfactory, and who shall need financial assistance.

The New York Alumni Association Scholarship, thirty dollars, will be awarded upon conditions to be determined by the board of trustees. In 1905 it was awarded to the student who excelled in debate.

The Pittsburg Alumni Association Scholarship yields tuition for one student for one year, will be awarded upon conditions to be determined by the President of the University.

The Maine Dairy Association offers three prizes to students in the school course in agriculture, for the best essays on subjects pertaining to dairying. The prizes are $15.00, $10.00, and $5.00.

Mr. L. C. Bateman of the Lewiston Journal offers a prize of $10.00 for the best essay on stable sanitation, by any student in any agricultural course.

Mr. H. E. Cook of Denmark, N. Y., and Mr. George Aiken of Woodstock, Vermont, each offer $5.00 for a prize in agriculture, the method of award to be determined later.

Honorable Z. A. Gilbert of North Greene, Maine, agricultural editor of the Maine Farmer, offers two prizes of $15.00 and $10.00 each, to students presenting the best essays on dairy subjects.

Honorable A. W. Gilman, Commissioner of Agriculture in Maine, offers two prizes of $15.00 and $10.00 each, for the best essays on "Agricultural Education."

ADMISSION

General Requirements.—Applicants for admission must pass the required examinations, or present satisfactory certificates of fitness, and file with the Treasurer a bond for $150 signed by two bondsmen, as security for the payment of term bills. A cash deposit covering the bills of one term will be accepted in place of a bond. In the College of Law the fees must be paid in advance, and no bond or deposit is required. The University admits men and women, both residents of Maine and non-residents.

Admission to Advanced Standing.—Candidates for advanced standing are examined in the preparatory studies, and in those previously pursued by the classes they propose to enter, or in other equivalent studies; a rank of 80% must be attained in order to pass any course in advance. Certificates from approved schools are accepted for the preparatory work; but certificates are not accepted for any part of the college work, unless such work has been done in a college. College graduates who wish to enter a technical course are admitted to the junior class without examination. Students who enter from another college must present a certificate of honorable dismissal from the authorities of the institution they are leaving.

Special Recommendations.—A good preparation in algebra and geometry is most important for those who expect to enter engineering courses. The schools should give a part of the work in algebra and geometry, or a review of these subjects, during the last year.

Students preparing for the classical courses should devote especial attention to Latin composition, Roman history, and constant practice in pronouncing Latin according to the Roman method.

Special Students.—Persons not candidates for a degree, who wish to take special studies, may be permitted to do so, if upon examination they give satisfactory evidence that they are prepared to take the desired studies. If they subsequently desire to become candidates for a degree, or to take a regular course, they will be required to pass the other entrance examinations. This privilege is intended for students of unusual maturity or previous advancement in particular subjects, not for those who are incompetent to pursue a regular course.

No examinations are required for admission to the special and extension courses in agriculture.

The terms of admission to the College of Law are stated under the proper heading.

Admission by Examinations

Entrance examinations are held at Orono, beginning two days before the opening of the fall term, and on the Thursday, Friday, and Saturday preceding Commencement. To save expense to candidates, examination papers will be sent to any satisfactory person who will consent to conduct examinations on the days appointed in June. Papers will not be sent at any other time. The questions are to be submitted under the usual restrictions of a written examination, and the answers returned to the University accompanied by the endorsement of the examiner. Applications for such examinations must be made out on blanks to be obtained from the Secretary of the faculty. Candidates for admission by examination, particularly those examined at Orono in September, should present statements from their principals regarding their fitness to take the examinations, and to undertake college work. The examinations set by the College Entrance Examination Board will be accepted in place of the above. A candidate who wishes to be examined on part of his work in advance of the year in which he proposes to enter the University may receive credit for such examination, provided he offers not less than one-half of his preparatory work. It is urged that candidates avail themselves of this privilege so far as possible. Examinations on subjects which are to be continued in college should not be taken more than one year in advance.

Admission by Certificate

Certificates for admission to the freshman class without examination are accepted only from graduates of schools approved by the New England College Entrance Certificate Board (except in the case of schools outside of New England). They will not be accepted for non-graduates except in extraordinary cases, and then only provided the candidate is expressly recommended for admission by the principal of the school from which he comes. Certificates must be made out on blanks furnished by the University.

Certificates from schools approved by the above-mentioned Board will be accepted at any of the institutions co-operating to maintain it. Any superintendent or principal desiring to have a school under his charge placed upon the approved list should apply before April 1st to the Secretary of the board, Professor Nathaniel F. Davis, 159 Brown St., Providence, R. I.

ENTRANCE REQUIREMENTS

The requirements for admission are those adopted by the Maine Association of Colleges and Preparatory Schools.

To gain admission into any of the courses leading to the degrees of B. A. or B. S., 26 points must be offered by the candidate, according to the following schedules (to count 2 points, a subject must be pursued for one school year, with five recitation periods a week):

For the B. A. Courses

Required Subjects

College Entrance English	counts	4 points
Latin	"	8 "
Algebra	"	4 "
Plane Geometry	"	2 "
Roman History	"	1 point
		19

Optional Subjects (7 Points to be Chosen)

(If Greek is not taken, French or German must be; and if Greek is taken, Greek History must be taken also. Not less than 4 points of any modern language will be accepted.)

Each year of Greek	counts	2 points
" " " French	"	2 "
" " " German	"	2 "
Chemistry (including note-book)	"	2 "
Physics (including note-book)	"	2 "
Solid Geometry	"	1 point
Greek History	"	1 "
English "	"	1 "
American History and Civil Government	"	1 "

FOR THE B. S. COURSES

(Engineering, Agriculture, Chemistry, Forestry, and all other courses not leading to the B. A. degree.)

Required Subjects

College Entrance English	counts	4 points
Algebra	"	4 "
Plane Geometry	"	2 "
Solid Geometry (College of Technology only)	"	1 point
		11

Optional Subjects (15 or 16 Points to be Chosen)

(Of these, two years of one modern language, one year of science, and one year of history must be taken. Not less than 4 points of any modern language will be accepted. Candidates entering a B. S. course and offering four years of Latin may complete their entrance credits without a modern language, but must take at least four credits in modern language work in college.)

Each year of French	counts	2 points
" " " German	"	2 "
" " " Latin	"	2 "
" " " Greek	"	2 "
Advanced Mathematics (higher Algebra and Plane and Spherical Trigonometry)	"	2 "
*Mechanical Drawing (for technical courses)	"	1 point
*Manual Training (for technical courses)	"	1 "

*Graduates from high schools giving a full manual training course may receive credit for two points in mechanical drawing, four in manual training, and one in free hand drawing.

Chemistry (including note-book)	counts	2 points
Physics (including note-book)	"	2 "
Physiography	counts	1 point or 2 points
Biology (including note-book)	counts	2 "
Botany (includng note-book)	"	2 "
Zoölogy (including note-book)	"	2 "
Roman History	"	1 point
Greek History	"	1 "
English History	"	1 "
American History and Civil Government	"	1 "

Candidates for the SHORT COURSE IN PHARMACY (two years) are examined on *Elementary Subjects,* Descriptive Geography, Arithmetic, English Grammar, Physiology; *History,* United States; *Mathematics,* Algebra through simple equations of the first degree.

REQUIREMENTS IN DETAIL

The following statement will show in detail the requirements in each subject.

LANGUAGE

ENGLISH.—Inasmuch as the examination in English is designed quite as much to test the candidate's ability to express himself well in his mother tongue as to test his knowledge of the books prescribed, he is urgently advised to pursue a thorough course in English composition, in which at least a part of the subjects written upon are from his own observation and experience. He is further urged to cultivate, in all his writing, habits of correctness in spelling, grammar, sentence structure, punctuation, and paragraphing. The examiner will regard mere knowledge of the books as less important than the ability to write good English.

Grammar. The usual school course.

Reading and Practice. The candidate is expected to read intelligently all the books prescribed. He should read them as he reads other books; he is expected to have only a general knowledge of their substance, but to have freshly in mind their most important parts. To test his knowledge and his power of clear and accurate expression, he will be required to write one or two paragraphs on each of several topics set before him on the examination paper. In place of this test the candidate may present an exercise book, certified by his instructor, containing compositions or other written work done in connection with the reading of the books.

In 1906, 1907, and 1908 it will be based upon: Shakespeare's Macbeth and The Merchant of Venice; The Sir Roger de Coverley Papers in The Spectator; Irving's Life of Goldsmith; Coleridge's The Ancient Mariner; Scott's Ivanhoe and The Lady of the Lake; Tennyson's Gareth and Lynette, Lancelot and Elaine, and The Passing of Arthur; Lowell's The Vision of Sir Launfal; George Eliot's Silas Marner.

Study and Practice. This part of the examination presupposes a careful study of the works named below. The examination will be upon subject matter, form, and structure; and will also test the candidate's ability to express his knowledge with clearness and accuracy.

In 1906, 1907, and 1908 it will be based upon: Shakespeare's Julius Cæsar; Milton's L'Allegro, Il Penseroso, Comus, and Lycidas; Burke's Speech on Conciliation with America; Macaulay's Essay on Milton, and Life of Johnson.

FRENCH.—*First Year.* Pronunciation; rudiments of grammar, including inflection of the regular and irregular verbs, plural of nouns, inflection of adjectives, participles, and pronouns, use of personal pronouns, common adverbs, prepositions, and conjunctions, word order, and elementary syntax; abundant easy exercises; 100-175 pages of graduated texts; practice in translating into French variations of sentences read; dictation, and reproduction from memory of sentences from text. Super's, or Whitney's Reader is recommended.

Second Year. 250-400 pages of easy modern prose; constant practice in translation of easy variations of the text into French; abstracts of the text; continuation of grammar; dictation.

The following texts are recommended: (1) Perrault's Contes de Fees, or Daudet's Easier Short Stories; (2) Erckmann-Chatrian's Mme. Therèse or Conscrit de 1813, or About's Roi des Montagnes, or Merimée's Colomba; (3) Labiche's Voyage de M. Perrichon, or Labiche et Martin's La Poudre aux Yeux.

Third Year. 400-600 pages of ordinary difficulty; constant practice in French paraphrases, abstracts, reproductions from memory; study of a grammar of moderate completeness; dictation.

The following texts are recommended: (1) Sandeau's Mlle. de la Seiglière, or Augier et Sandeau's Le Gendre de M. Poirier; (2) Corneille's Le Cid or Horace; (3) Racine's Athalie or Andromaque; (4) Molière's L'Avare or Le Bourgeois Gentilhomme; (5) Hugo's Hernani, or Coppée's Poems.

GERMAN.—*First Year.* Pronunciation: memorizing and frequent repetition of easy colloquial sentences; grammar: article, commonly used nouns, adjectives, pronouns, weak verbs and more used strong verbs, more common prepositions, simpler uses of modal auxiliaries,

elementary rules of syntax and word-order; abundant easy exercises in composition; 75-100 pages of graduated texts from a reader; constant practice in translating into German easy variations of text, and reproduction from memory of sentences from text.

Second Year. Continued drill on rudiments of grammar; 150-200 pages of easy stories and plays; continued translation into German of easy variations on matter read and off-hand reproduction, orally and in writing.

The following texts are recommended: (1) Andersen's Märchen or Bilderbuch, or Leander's Träumereien, about forty pages; (2) Hauff's Das Kalte Herz, or Zschockke's Der Zerbrochene Krug; (3) Hillern's Höher als die Kirche, or Storm's Immensee; (4) a short story from Heyse or Baumbach or Seidl; (5) Benedix' Der Prozess.

Third Year. (See below.) Grammar; less usual strong verbs, use of articles, cases, auxiliaries, tenses and moods (particularly the infinitive and subjunctive), word-order and word-formation; about 400 pages of moderately difficult prose and poetry; constant practice in paraphrases, abstracts and memory reproductions of passages read.

The following texts are recommended: (1) one of Riehl's Novelettes; (2) a part of Freytag's Bilder aus der Deutschen Vergangenheit; (3) a part of Fouque's Undine, or a part of Schiller's Geisterseher; (4) a short course in Lyrics and Ballads; (5) one classical play by Goethe, or Schiller, or Lessing.

Candidates may present themselves for an examination in French or German based upon the Third Year Courses outlined above and upon obtaining a rank of 80% will be allowed to pursue advanced work in college. But this examination in the Third Year Course will not be received in lieu of any required examination for admission, or of work required for a certificate.

Latin.—The grammar, including prosody; Cæsar's Gallic War, books I-IV; Cicero's four orations against Catiline, and those for Archias and for the Manilian Law; Vergil's Eclogues and the Æneid, books I-VI; the sight translation of Latin passages of moderate difficulty; the translation into Latin of simple English sentences, and of easy narrative passages based on the prose authors read. For the last a vocabulary of less usual words will be furnished. Equivalent readings will be accepted for those prescribed.

Greek.—The grammar, including prosody; Xenophon's Anabasis, books I-IV; Homer's Iliad, books I-III; the sight translation of easy passages from Xenophon; the translation into Greek of easy passages based on the required books of the Anabasis. For the last a vocabulary

of less usual words will be furnished. Equivalent readings will be accepted in place of those prescribed.

History

Greek History.—History of Greece, to the capture of Corinth, 146 B. C. Myers, Morey, or Botsford.

Roman History.—A knowledge of Roman history, down to the death of Marcus Aurelius, such as may be obtained from Allen's Short History of the Roman People, or from Myers's Rome: Its Rise and Fall, or from Morey's Outlines of Roman History.

English History.—A knowledge such as may be obtained from Montgomery, Coman and Kendall, Terry, or Cheyney's History of England.

United States History.—A knowledge such as may be obtained from Fiske, Hart, Montgomery, or McLaughlin's History of the United States.

Mathematics

Algebra.—The elements, equations of the first degree, radicals, the theory of exponents, quadratic equations, ratio and proportion, arithmetical and geometrical progression, the binomial theorem. A satisfactory preparation may be obtained from Wells's Academic, or Wentworth's School Algebra or any equivalent text. Candidates for the short course in pharmacy will be examined on no topics beyond simple equations of the first degree.

Plane Geometry.—The first five books of Wells's, or of Wentworth's Geometry, or an equivalent. Numerical exercises, original propositions and the neat and careful construction of figures should not be neglected. The examination will include original propositions for demonstration or construction.

Solid Geometry.—Books VI-IX of Wells's, or books VI-VIII of Wentworth's Geometry, or an equivalent. The examination will be planned to test the candidate's ability to apply the theorems to the computation of surfaces and volumes, as well as his readiness in demonstration.

Sciences

* Chemistry.—The necessary ground is covered by the following text-

* The work in these sciences must include certified note-books exhibiting the results of experimental work performed by the student. In physics forty exercises are required and in chemistry fifty exercises. These note-books should be presented at the examination.

books: Fisher, Remsen, Roscoe (inorganic part), Shepard, Storer, and Lindsay, Williams.

Physical Geography (Physiography).—A satisfactory preparation may be obtained from Appleton's Physical Geography.

* Physics.—The work usually covered in one year in a good fitting school.

* Biology.—This may consist of a continuous course for one year dealing with the problems of general biology, including the study of the structure, functions, and habits of both plants and animals; a course for one year in botany alone; a course for one year in zoölogy alone; or a course for one half year in human physiology. The human physiology may be arranged to form a part of the general biology, or of the zoölogy, but in such cases it must be treated as an integral part of the subject under consideration.

Elementary Subjects

Descriptive Geography.—The usual school course. Required for short pharmacy course only.

Arithmetic.—The usual school course, including the metric system of weights and measures. Required for the short pharmacy course only.

---

* The work in these sciences must include certified note-books exhibiting the results of experimental work performed by the student. In physics forty exercises are required and in chemistry fifty exercises. These note-books should be presented at the examination.

REQUIREMENTS FOR GRADUATION

The college year is divided equally into a fall term and a spring term. Five recitation hours a week of successful work for one term entitle a student to one credit. The minimum regular work for a term is fourteen hours a week (exclusive of physical training and military science), leading to two and eight-tenths credits. Six credits represent the minimum work of a year required for a degree. In making up the quota of studies, laboratory work, and other studies not requiring preparation, count as half time—that is, two hours in the laboratory are counted as equivalent to one hour. The hours devoted to such studies are marked with a dagger (†) in the detailed description of courses of instruction.

Except in the College of Law, the Short Pharmacy Course, and the School Course in Agriculture, candidates for graduation are required to complete a four-years course of study by securing from twenty-five to thirty credits, according to the course chosen.

DEPARTMENTS OF INSTRUCTION

AGRONOMY

Professor Hurd; Professor Gilbert

Ag 1. Soils.—Lectures and recitations beginning with the classification of and fundamental principles underlying the science of Agriculture; the nature, origin, formation, and classification of soils; the relation of soils to plants, water, heat, gases, etc.; the chemical elements in soils; factors determining soil fertility; soil inoculation; the conservation of soil moisture; the adaptability of crops to different kinds of soils; the objects and benefits of crop rotation; the improvement of unproductive land, the conditions requiring, necessity for, advantages, and methods of drainage; irrigation. *Two hours a week.* Fall term.

Ag 2. Soil Physics.—A course taken in connection with Ag 1, consisting of a study of the different soils under field conditions; soil surveying and mapping; the collecting and sampling of soils for laboratory work. This laboratory course is designed to prepare the student better to understand the different methods of treatment of soils and the effect of these methods upon moisture, texture, aeration, fertility, and production. The work comprises the determination of such constants as specific gravity, water-holding capacity, evaporation and capillary power of various types of soils, and the mechanical analysis of soils. † *Two hours a week.* Fall term.

Ag 3. Agricultural Engineering and Farm Mechanics.—

(a) *Farm Surveying and Drainage.* The plotting of farms and the measurement of land; leveling for drains, estimating size of tile required, cost of drain, etc.; the making of roads, with practice in the construction of roads on the college farm.

(b) *Farm Mechanics and Farm Machinery.* A study of the simpler laws of mechanics used in operating farm implements; the principles of draft, the handling in the field, the taking apart and the putting together of the different classes of farm implements in possession of the department; the relative merits of wind, gasoline, denatured alcohol, steam, and electricity, as sources of power on the farm.

(c) *Farm Management.* A study of different forms and types of farming; the keeping of farm accounts; the planning of a season's

work; the management of men and teams; and estimated cost of different farming operations.

(d) *Rural Architecture.* The planning, designing, location, and construction of farm buildings, including water supply, sewage, etc. † *Four hours a week.* Fall term.

Ag 4. Manures and Fertilizers.—A study of the value of stable manure in successful crop production; its chemical composition, preservation, best methods of storing, and time and manner of applying on the land; the source, chemical composition, and comparative value of chemicals used as fertilizers; the working out of fertilizer formulæ suited to the needs of different soils and special crops; the importance of lime in agriculture, its physical and chemical effect on different soils, best forms to buy, when to apply, and the amount to use. Practice in home mixing fertilizers and field tests is given students each year on the college farm. *Two hours a week.* Spring term.

Ag 5. Field Crops.—Lectures and recitation work on the history, distribution, uses, chief characteristics, and adaptability of the principal farm crops; the best methods of producing them, including crop rotations, preparation of the land, fertilizing and seeding; a study and treatment of the injurious insects and diseases affecting them, and the harvesting, marketing, and storing of crops. *Three hours a week.* Fall term.

Ag 6. Advanced Agronomy.—Elective, advanced work for those who have completed the required work of the first three years. Lectures and recitations along lines of Experiment Station work; the application of plant breeding to the improvement of farm crops. The student will carry out original investigations along some chosen line under the direction of the instructor. *Three hours a week.* Fall term.

Ag 7. Advanced Agronomy.—A continuation of course 6. *Two hours a week.* Spring term.

Ag 8. General Agriculture.—A history of agriculture from the earliest times, including that of the Jews, Egyptians, and Romans, to the present day; the beginning of British agriculture, and the development of modern agriculture with especial reference to that of England, Germany, France, and other foreign countries; the agriculture of the United States, its influence on social conditions, its relation to the State and Nation; the importance of our leading products, and their effect on

the world's commercial life; the agriculture of different sections. Rural life and rural development. Lectures supplemented by illustrative material. Elective and open to all students of the University. *One hour a week.* Spring term.

Ag 9. Soil Fertility.—A laboratory course in soil chemistry and soil fertility embracing experiments to determine the relative fertility of different soils. Experiments such as are conducted in the laboratories of the United States Department of Agriculture will be carried out. The preparation and testing of reagents used in this work, a course based on Wiley's Agricultural Analysis, the methods adopted by the Association of Agricultural Chemists, and Hopkins & Pettit's Laboratory Manual for Soil Fertility. Elective for juniors and seniors. † *Two hours a week.* Spring term.

Ag 10. Seminary.—A study of current agricultural literature and topics, assigned readings from which abstracts and reports are to be given before the class. Elective. † *Two hours a week.* Spring term.

ANIMAL INDUSTRY

Professor Gowell; Mr. Campbell

An 1. Animal Breeding.—A study of the types and breeds of the different classes of horses, cattle, sheep, swine, and poultry; their history, developement, economic values, and adaptation to different purposes and conditions. The work is given by lectures and text-books. *Two hours a week.* Spring term.

An 2. Laboratory Animal Breeding.—Studying and handling animals of the different breeds and classes; practice in the use of the score cards in judging. † *Two hours a week.* Spring term.

An 3. Animal Breeding.—A continuation of course 1. Lectures and recitations on the principles of breeding. *Two hours a week.* Fall term.

An 3a. Laboratory Animal Breeding.—A continuation of course 2. † *Two hours a week.* Fall term.

An 4. Animal Feeding.—Food requirements of different kinds of animals; composition of foods and the nutrients furnished by them;

feeding formulas; calculating rations; valuation of foods; pasturing; soiling; methods of feeding. *Two hours a week.* Fall term.

An 5. Dairying.—Lectures and recitations upon the composition and formation of milk; its production and aeration; pasteurization, sterilization, creaming, fermenting; the manufacture of butter and cheese. *Two hours a week.* Spring term.

An 6. Laboratory Dairying.—Practice in handling and testing milk and cream for acidity and solids; curing cream; making butter and cheese; operating dairy machinery. *Seven hours a week for six weeks.* Spring term.

An 7. Advanced Animal Industry.—Elective for those who have taken An 1 to An 7 inclusive. *The time varies.* Fall term.

An 8. Advanced Animal Industry.—A continuation of course 7. *The time varies.* Spring term.

ART

Professor Huddilston offers certain courses in art which are described in connection with the department of Greek. See page 77.

BIBLIOGRAPHY

Professor Jones

Bb 1. Bibliography.—Origin of the alphabet; development of writing; inscriptions; manuscripts; invention of printing; early printed books; modern bookmaking; bookbinding and the care of books; library processes and aids; public documents; periodicals; libraries, ancient and modern. A lecture course, with collateral reading and reference work. *One hour a week.* Spring term.

Three lectures are given on The Library and Its Use; Classification and the Catalog and Reference Books and Their Use. Required of all freshmen. Fall term.

BIOLOGY

Professor Drew; Professor Russell; Mr. Cummings; Miss Balentine; Mr. Edwards

The subjects given below are arranged numerically, but not in the order in which it is best for students to pursue them. It is desirable that all intending to take biology should begin with courses 1 and 2.

Bl 1. General Biology.—This course is devoted to the study of the general principles governing the activities of living things, both plants and animals. It is open to all students, and should form the basis for other work in either zöology or botany. It is to be taken in connection with course 2. *Two hours a week.* Fall term.

Bl 2. Laboratory Biology.—To be taken in connection with course 1. † *Two hours a week.* Fall term.

Bl 3. Mammology.—The course is devoted to the habits, relationship, and geographical distribution of members of the group. Special attention is given to their adaptations for the life they lead. Open to all students. *Two hours a week.* Fall term.

Bl 4. Bacteriology.—A lecture course for all students who are unable to take a laboratory course. *One hour a week.* Fall term.

Bl 5. Zoölogy (Invertebrate Animals).—Representatives of the invertebrate groups of animals are studied in the laboratory, class-room, and field, where attention is given to their habits, comparative anatomy, and to some extent to their embryology and classification. This course is to be taken in connection with course 6, and is not complete without courses 7 and 8. Courses 1 and 2 are required as a preparation. *Two hours a week.* Fall term.

Bl 6. Laboratory Zoölogy.—To be taken in connection with course 5. † *Six hours a week.* Fall term.

Bl 7. Zoölogy (Vertebrate Animals).—A continuation of course 5. Types of the vertebrates are studied and their structures compared. A few weeks are devoted to the embryology of the frog. This course is to be taken in connection with course 8. It must be preceded by courses 1, 2, 5, and 6. *Two hours a week.* Spring term.

Bl 8. Laboratory Zoölogy.—To be taken in connection with course 7. † *Six hours a week.* Spring term.

Bl 9. Physiology.—Attention is given to the physiological activities of the human body, with enough anatomy to render the physiological discussions intelligible, and enough hygiene to serve as a guide for the intelligent care of the body. Open to all students. *Two hours a week.* Spring term.

Bl 11. Entomology.—Insects are studied with special reference to their habits, life-histories, and structure. Attention is given to their economic importance, and the methods of controlling them. † *Four hours a week.* Spring term.

Bl 12. Advanced Physiology.—Intended for those who already have an elementary knowledge of general biology and physiology. This course is to be taken in connection with course 13 and must be preceded by courses 1 and 2. *Three hours a week.* Spring term.

Bl 13. Laboratory Physiology.—To be taken in connection with course 12. It consists of anatomical study and simple experiments. † *Four hours a week.* Spring term.

Bl 14. Advanced Zoölogy.—This course offers an opportunity for special zoölogical work along lines best suited to the future plans of the student. It may consist of field work, laboratory work, or reading, or a combination of all three. *The time varies, and the work may be continued a number of terms.* Fall and spring terms.

Bl 15. Veterinary Science.—A combined lecture and laboratory course dealing with the anatomy and physiology of our domestic animals. *Two hours a week.* Spring term of odd years.

Bl 16. Veterinary Science.—Lectures, demonstrations, and clinics, illustrated by models, natural preparations, and living animals. *Three hours a week.* Spring term of even years.

Bl 17. Bacteriology.—An elementary laboratory course, including the preparation of culture media and a critical study of the morphological and biological characteristics of a few typical bacteria. Students in agriculture give especial attention to the bacteriology of the dairy. † *Ten hours a week for nine weeks.* Last part of spring term.

Bl 18. Animal Histology.—A laboratory course in normal animal histology. Starting with perfectly fresh material, the work consists in the preparation, hardening, embedding, cutting, staining, and mounting of the various normal tissues and organs of animals. † *Ten hours a week for nine weeks.* First part of spring term.

Bl 19. Laboratory Bacteriology.—An advanced course. † *Ten hours a week for nine weeks.* Last part of spring term.

Bl 20. Organic Evolution.—Some of the more important facts on which the theory is based are presented for consideration, and subjects for individual reading and essays are assigned. *One hour a week.* Spring term of odd years.

Bl 21. General Botany (Flowering Plants).—The course includes a brief consideration of the fundamental principles of the structure, physiological functions, habits, and systematic relations of flowering plants. This course must be taken in connection with course 22, and should follow courses 1 and 2. *One hour a week.* Spring term.

Bl 22. Laboratory Botany.—To be taken in connection with course 21. †*Four hours a week.* Spring term.

Bl 23. General Botany (Flowerless Plants).—Type forms of algae, fungi, lichens, liverworts, mosses, and ferns are studied in the laboratory and in the field. Attention is given to their structures, life histories, and habitats, as well as their relations to the higher forms of plants. This course must be preceded by courses 1 and 2, and should be preceded by courses 21 and 22. †*Four hours a week.* Fall term.

Bl 25. Plant Histology.—The minute structure of plants, including the anatomy of the cell, is studied, and attention is given to growth, variation, and adaptation of cellular structures, and the formation and distribution of tissue systems. Killing, staining, and mounting plant tissues forms part of the work. This course is to be taken in connection with course 26 and must be preceded by courses 21 and 22. *One hour a week.* Fall term.

Bl 26. Laboratory Plant Histology.—To be taken in connection with course 25. †*Four hours a week.* Fall term.

Bl 27. Plant Physiology.—Attention is given to the physiological activities of plants: the processes of nutrition and reproduction; the phenomena of respiration, transpiration, and growth; response to various stimuli, such as light, heat, moisture, and gravity. This course must be preceded by courses 21 and 22 and should be preceded by courses 23, 25 and 26. It is advisable to take this course in connection with course 28. *One hour a week.* Spring term.

Bl 28. Laboratory Plant Physiology.—To be taken in connection with course 27. †*Two hours a week.* Spring term.

Bl 29. Agricultural Botany.—This course deals with the plants of the farm and consists of three parts. 1. Seeds.—Structure, function and dispersal. Buying, selling, testing, and identification. 2. Weeds.—Origin and distribution; their benefits, disadvantages, and methods of eradication; systematic study of Maine weeds. 3. Grasses.—Origin and distribution of the important grasses; their duration, reproduction, and pollination; identification of species. This course must be taken in connection with course 30. *Two hours a week.* Fall term.

Bl 30. Laboratory Agricultural Botany.—To be taken in connection with course 29. † *Two hours a week.* Fall term.

Bl 31. Plant Pathology.—Attention is given to the diseases of plants resulting from the attacks of fungi and those induced by unfavorable environment. The causes, symptoms, and treatment of the common diseases of familiar plants are considered. This course must be taken in connection with course 32. *One hour a week.* Given in the spring term of odd years.

Bl 32. Laboratory Plant Pathology.—To be taken in connection with course 31. † *Two hours a week.* Spring term.

Bl 33. Elementary Botany.—Studies in the structure and functions of the organs of plants in their order of development. Agents of pollination, the process of fertilization of flowers, and the distribution of seeds and fruits. Exercises in plant analysis, and the identification of species in the field. To be taken in connection with course 34. Open to students who have had neither preparatory botany nor courses 1 and 2. *One hour a week.* Spring term.

Bl 34. Laboratory Elementary Botany.—Practical studies of seed plants in the laboratory and in the field. To be taken in connection with course 33. † *Four hours a week.* Spring term.

Bl 35. Pharmaceutical Histology.—Exercises on the use of the microscope; the magnification of objects, and microscopic measurements. A study of cells and tissues, and food products found in them; followed by exercises in the detection of the common adulterants of familiar drugs. To be taken in connection with course 36. Open to students who have taken courses 33 and 34. *One hour a week.* Fall term.

Bl 36. Laboratory Pharmaceutical Histology.—To be taken in connection with course 35. †*Four hours a week.* Fall term.

Bl 37. Advanced Botany.—This course offers an opportunity for special work in botany along lines best suited to the future plans of the student. It may consist of field work, laboratory work, or reading, or a combination of all three. *The time varies and the work may be continued a number of terms.* Fall and spring terms.

Bl 38. Forest Botany.—A study of plant life in the forest. Particular attention will be given to the structure, function, and relations of the organs of trees to their environment; the development of tissues of woody plants and their diagnostic value; a systematic account of the trees of the United States, with special reference to those of commercial value. Open to those who have taken Bl 21 and 22; to be taken in connection with Bl 39. *Two hours a week.* Fall term.

Bl 39. Forest Botany.—Field and laboratory work. Excursions to identify the trees and shrubs about Orono, including the collection, preparation, and classification of a forest herbarium. Microscopic work in the study of the morphological elements of trees, and the making of a bud key. †*Four hours a week.* Fall term.

Bl 40. Forest Botany.—A continuation of course 38. To be taken in connection with course 41. *Two hours a week.* Spring term.

Bl 41. Forest Botany.—Field and laboratory work. A continuation of course 39. †*Four hours a week.* Spring term.

CHEMISTRY

Professor Aubert; Dr. Bedford; Mr. Seabury

Ch 1. General Chemistry.—Recitations and lectures on the general principles of chemistry, illustrated by charts, experiments, etc. To obtain credit for this course, it must be accompanied by course 3, and followed by courses 2 and 4, unless a special excuse is obtained. The text-book is Remsen's Chemistry. *Two hours a week.* Fall term.

Ch 2. General Chemistry.—A continuation of course 1. *Three hours a week.* Spring term.

Ch 3. Laboratory Chemistry.—Practical work to accompany course 1. The text-book is Keller and Smith's Laboratory Experiments. † *Two hours a week.* Fall term.

Ch. 4. Laboratory Chemistry.—A continuation of course 3, to accompany course 2, with elementary qualitative analysis for those who advance far enough. †*Two hours a week.* Spring term.

Ch 5. Advanced Inorganic Chemistry.—Lectures and recitations, illustrated by specimens. The text-book is Jones's Principles of Inorganic Chemistry. *Two hours a week.* Fall term. No credit is given unless course 6 is taken, except by special arrangement. Open to students who have taken courses 1, 2, 3, and 4.

Ch 6. Advanced Inorganic Chemistry.—A continuation of course 5. *Three hours a week.* Spring term.

Ch 7. Elementary Organic Chemistry.—The marsh gas series. Lectures and recitations, illustrated by specimens. The text-book is Remsen's Organic Chemistry. *Three hours a week.* Fall term. This course must be followed by course 8, and preceded by courses 1, 2, 3, 4, 5 and 6, except for those especially admitted.

Ch 8. Elementary Organic Chemistry.—The unsaturated compounds and the benzene series. A continuation of course 7. *Two hours a week.* Spring term.

Ch 12. Chemical Preparations.—The preparation and purification of typical organic and inorganic substances. Open to students who have taken courses 1, 2, 3, 4, 5, 6, 7, and 8. Text-book, Aubert's Organic and Inorganic Preparations. *Five hours a week.* Fall term.

Ch 13. Descriptive Mineralogy.—The text-book is Moses and Parson's Elements of Mineralogy. *Three hours a week.* Spring term.

Ch 14. Qualitative Analysis.—A laboratory study of the chief elements and their derivatives with a view to a clear understanding of their properties. Supplemented by class room work. The text used is Medicus's Qualitative Analysis. *Not less than † eight hours per week, unless by special arrangement.* Fall term. Open to students who have taken courses 1, 2, 3, and 4, except for students in the short pharmacy course. It is generally advised that course 5 be taken with this course, and it must be followed by course 15.

Ch 15. Qualitative Analysis.—A continuation of course 14, with the application of analytical methods to the determination of unknown substances of increasing complexity. Elementary analysis by means of the spectroscope is given. Course 6 is usually an accompanying study, except for students in the short pharmacy course. *Time, the same as course 14.* Spring term.

Ch 16. Quantitative Analysis.—Gravimetric determinations. The text is Appleton's Quantitative Chemical Analysis. *Not less than † eight hours per week, unless by special arrangement.* For satisfactory preparation, the student should have taken courses 1, 2, 3, 4, 14, and 15; and he should add courses 18 and 19.

Ch 18. Quantitative Analysis.—Analysis of complex alloys, minerals, etc. The text used is Olsen's Qualitative Chemical Analysis. *Not less than † eight hours per week, unless by special arrangement.* Fall term. Open to students who have taken course 16 and its requirements.

Ch 19. Volumetric Analysis and Assaying.—Acidimetry, alkalimetry, oxydimetry; gold and silver assaying. Text, *time,* and general requirements the same as for course 18.

Ch 20. Agricultural Analysis.—The analysis of fodders, fertilizers, milk, and other products. The methods are those recommended by the Association of Official Agricultural Chemists. Except in special cases, the *time* and requirements are the same as for course 18.

Ch 21. Toxicology and Urinalysis.—The determination of the more common poisons; the analysis of urine. Text, Aubert's Urinalysis and Toxicology. *Time,* and general requirements, the same as for course 18.

Ch 22. Thesis Work.—The thesis must embody the result of original work in analysis or research. † *Fifteen hours a week for eleven weeks.* Spring term. Open to students who have taken courses 1, 2, 3, 4, 5, 6, 7, 8, 12, 14, 15, 16, 18, 19, 20, 21, 23, 24, and 28.

Ch 23. Organic Chemistry.—An advanced course. Text-book, Joannis's Cours de Chimie, Vol. III. *Three hours a week.* Fall term.

Ch 24a. Industrial Chemistry.—General processes of technical chemistry, and selected topics, including the principal manufactured products of special interest. Lectures and recitations. The text-book is Thorp's Outlines of Industrial Chemistry. *Two hours a week.* Fall term. Open to students who have completed courses 5, 6, 7, and 8.

Ch 24b. Industrial Chemistry.—A continuation of course 24a. *Two hours a week.* Spring term.

Ch 25a. Technical Analysis.—An advanced course in analysis of ores and industrial products. Open to students who have completed courses 16, 18, 19, and their requirements. † *Five hours a week.* Fall term.

Ch 25b. Technical Analysis.—Organic technical products, and advanced mineral analysis. † *Five hours a week.* Spring term.

Ch 26. Physical Chemical Methods.—The determination of molecular weights by the vapor density, boiling point, and freezing point methods; the use of the refractometer and the polariscope. † *Five hours a week.* Spring term.

Ch 28. Dyeing. The practical application of dyes to cotton, wool and silk. † *Fifteen hours a week for two weeks.* Spring term.

Ch 29. Agricultural Chemistry.—A course on the chemistry of soils and fertilizers. It includes the relation of soils to heat and moisture; the mechanical condition of soils best suited to plant growth, and the objects to be gained by cultivation; the origin, composition, preparation, and use of commercial fertilizers; the supply, composition, care, and use of farm manures, and the general considerations which pertain to the maintenance of soil fertility. *Five hours a week.* Given in the spring term of even years. Open to students who have completed courses 1, 2, 3, and 4.

Ch 30. Biological Chemistry.—Lectures and recitations on the composition of the air, soils, natural waters, and plants; the source and assimilation of plant food; the composition of the animal body and of food materials; the chemical changes involved in the digestion and assimilation of food; the chemistry of milk and dairy products; and the chemical processes and methods of investigation by which these subjects are studied. *Five hours a week.* Fall term.

Ch 31. Chemical Equations.—Principles governing chemical reaction; their application to equations; advanced equation writing; oxidation and reduction. The text-book is Prescott and Johnson's Qualitative Chemical Analysis. *Two hours a week.* Spring term.

Ch 32. Physical Chemistry.—This course is devoted to the study of the general principles of physical chemistry. Lectures and recitations. *Two hours a week.* Spring term of even years. Open to students who have completed Ch 6.

CIVICS

Professor Rogers

Professor Rogers's courses will not be given this year

CIVIL ENGINEERING

Professor Boardman; Mr. Brown; Mr. Grover; Mr. Emery

Ce 1. Plane Surveying.—Recitations on the general principles of plane surveying; instruments, their adjustments and uses; land survey computations, direct leveling, and the variation of the magnetic needle. The text-book is Raymond's Surveying and Pence and Ketchum's Field Manual. *Two hours a week.* Spring term.

Ce 2. Field Work in Surveying.—The use of the chain, compass, transit, and level; the adjustment of instruments; original surveys. Plats are prepared of surveys made in the field. The text-book is Field Manual by Pence and Ketchum. † *Six hours a week.* Spring term.

Ce 3. Railroad Curves and Earthwork.—Lectures and recitations on the theory of railroad curves, switches, turnouts, slope stakes, and the calculation of earthwork. The text-book is Allen's Railroad Curves and Earthwork, together with Allen's Tables. *Three hours a week.* Fall term.

Ce 4. Railroad Work.—The survey of a railroad about three miles long. The preliminary and location surveys are made, including the running in of the curves, establishing the grade, setting the slope stakes, and the calculation of the earthwork. † *Six hours a week.* Fall term.

Ce 5. Highway Engineering.—The location, construction, and improvement of country roads under different conditions of soil, climate, and traffic. *One hour a week.* Fall term.

Ce 7. Drawing.—Isometric and cabinet projections, perspective, tracing, and lettering; stereotomy, giving the application of the methods of descriptive geometry to the preparation of drawings for arches, retaining walls, bridge abutments, piers, etc. † *Six hours a week for nine weeks.* Fall term. † *Six hours a week for nine weeks.* Spring term.

Ce 8. Sanitary Engineering.—Sewerage systems; drainage and sewerage of towns; drainage of sewerage systems; sewage disposal; water supply and purification; sewerage treatment. The text-book is Folwell's Sewerage. *Two hours a week.* Fall term.

Ce 9. Surveying.—The plane table, topographical surveying, precise leveling, the elements of geodesy, the measurement of a base line, triangulation. This course is given during the first two weeks following Commencement, *and counts as 100 hours.* Required of juniors.

Ce 10. Hydraulics.—Fundamental data; hydrostatics; theoretical hydraulics; instruments and observations; theoretical and actual flow through orifices, weirs, tubes, pipes, and conduits; dynamic pressure of water. The text-book is Merriman's Hydraulics. *Three hours a week.* Spring term.

Ce 11. Hydraulic Field Work.—The measurement of the flow of rivers is illustrated by the use of the current meter, and various forms of floats. Trips are made to the United States Geological Survey gaging station located on the Penobscot river between Howland and West Enfield, where discharge measurements are made, the data thus obtained being used together with that obtained from the Survey to plot the rating curve, etc. The measurements are reported to the Survey. The charge for this course is $5.00. † *Four hours a week.* Fall term.

Ce 12. Structures.—A continuation of course 21. The theory of stresses in framed structures; graphical statics; the principles of designing; the plate girder, bridge trusses, roof trusses. The object of this course is to train the student in the application of the principles of applied mechanics. *Three hours a week.* Fall term.

Ce 13. Structures.—A continuation of course 12. Higher structures, including draw bridges, cantilever bridges, suspension bridges, arches, steel buildings. *Five hours a week.* Spring term.

Ce 14. Designing.—Designs for some of the common types of steel structures, and preparation of drawings for the shop. † *Ten hours a week.* Fall term.

Ce 15. Designing.—A continuation of course 14. † *Fifteen hours a week for ten weeks.* Spring term.

Ce 16. Hydraulic Engineering.—Rainfall, evaporation, and stream flow. Water meters, water wheels, and motors. The development and utilization of water power. The collection, purification, and distribution of water for city supplies. *Two hours a week.* Fall term.

Ce 17. Hydraulic Engineering.—A continuation of course 16. *Two hours a week.* Spring term.

Ce 18. Sanitary Science.—Lectures on the causes and prevention of disease, sanitation, and the public health, and the relations of the engineer to this work. *One hour a week.* Fall term.

Ce 19. Railroad Engineering.—A course discussing the economics of railroad location, also the subjects of brakes, signals, rolling-stock, yards, stations, etc. *Two hours a week.* Spring term.

Ce 20. Masonry Construction.—Building stone; cements and their tests; mortar; concrete; piles; foundations; pneumatic caissons; open caissons; bridge piers and abutments. Lectures and recitations. The text-book is Baker's Masonry Construction. *Two hours a week.* Fall term.

Ce 21. Structures.—The theory of the simple beam; loads; reactions; vertical shear; shear; bending moment; influence lines. The object of this course is to give the student a drill in finding vertical shear and bending moment under different systems of loadings, and to familiarize him with the use of steel hand books, the moment diagram, different tables, and the slide rule. *Two hours a week.* Spring term.

Ce 22. Foundations.—Building stones. Manufacture of cement. Cement tests; mortar; concrete. Elective for seniors and juniors in courses in mechanical and electrical engineering. Lectures. *One hour a week.* Fall term.

Ce 23. Hydraulics.—A short course elective to juniors in courses in mechanical and electrical engineering. Lectures. *One hour a week.* Spring term.

ECONOMICS AND SOCIOLOGY

PROFESSOR SPRAGUE.

Ec 1. POLITICAL ECONOMY.—This course deals with the principles and theory of modern economic thought, production and consumption of wealth, values, commerce and shipping, tariff problems and tariff history, labor problems, trusts and monopolies, and other economic questions. A series of lectures will be given on economic history. Text-book and open discussions with collateral readings. *Five hours a week.* Fall term.

Ec 2. MONEY, BANKING, AND PUBLIC FINANCE.—This course is given to a study of the general history of money, financial history of America, problems of the single and double standards, banking in Europe and America, crises and depressions, federal and local taxation and other financial interests. Text-book and lectures. *Five hours a week.* Spring term.

Ec 3. SOCIOLOGY.—This course is devoted to authropological evolution, races and racial characteristics, history of the family, religious organisms, the State and property, and such current social problems as divorce, criminality and prison reform, poverty and its relief, etc. General sociological theory will occupy the last few weeks. The course is open to those who have taken political economy, and to others by special permission. *Five hours a week.* Fall term.

Ec 4. PRACTICAL SOCIAL REFORM.—Socialism, communism, and communistic settlements, anarchy, nihilism, European systems for insurance of wage earners, trade-union relief associations, and other efforts providing against misfortune and old age. Lectures and readings. Open to those who have taken Ec 3, and to others by special permission. *Five hours a week.* Spring term.

Ec 5. INTERNATIONAL LAW.—The principles, history, and prominent "cases" of international law constitute the main part of the work. American diplomacy and important foreign treaties will be given much attention. Text-book, discussions, and lectures. *Three hours a week.* Fall term.

Ec 6. BUSINESS LAW.—This course aims to acquaint the student with those legal principles and practices which are essential to a business life and with which every active citizen should be familiar; rights, contracts, agency, partnerships and corporations, bailments, guaranty, insurance, etc. Lectures with readings. *Three hours a week.* Spring term.

Ec 7. Governments of Europe.—A brief review of the development and ancient types of government, followed by a detailed comparative study of modern European governments, their politics and national problems. A lecture course with collateral readings. *Two hours a week.* Fall term.

Ec 8. American Government.—The principles and interpretation of the Federal Constitution, history of political parties and critical periods of the country, to be followed by the problems of state and municipal governments. Lectures and readings. *Two hours a week.* Spring term.

EDUCATION

Professor Davidson.

Ed 1. History of Education.—From the Greeks to Rousseau. Ideals of education at each stage of development; their sources, and modification through the intellectual life and convictions of the people; organization of instruction and the results obtained. *Three hours a week.* Fall term.

Ed 2. History of Education.—Course 1 continued,—the development of education traced down to the present time. *Three hours a week.* Spring term.

Ed 3. Organization and Administration.—Growth of present conceptions of education in the United States; organization of education in the different states; also in Germany, France, and England; comparative study of education in three typical states—Massachusetts, New York, and California—and special study of the school system of Maine. *Three hours a week.* Fall term.

Ed 4. Organization and Administration Continued.—Problems within the state: town schools and city schools; duties of all officers; certification of teachers and supervision; financial support; defects and excellences of present organization. Problems within the school: powers and duties of the teachers; programs and courses of study; government, and student activities; grading and backward pupils; class and individual instruction. *Three hours a week.* Spring term.

Ed 5. General Methodology.—Avenues through which knowledge reaches the child and methods of effective approach. Training in analysis, synthesis, and reasoning; inculcation of habits of attention,

discrimination, judgment; methods of imparting instruction by topical recitation, question, and exposition; the use of examination, note-book, library, and laboratory methods. *Three hours a week.* Fall term.

Ed 6. Special Methodology.—All high school teachers, principals, and superintendents should be specialists in some high school subject. After conference with his major instructor, a course of study, reading, and practice will be mapped out for each student in the methods most applicable in his specialty. *Three hours a week.* Spring term. Open to those only who have taken Course 5.

Ed 7. School Hygiene.—Habits for healthful living; hygienic conditions in home and school; ventilation and sanitation; habits of study in school and at home; physical examination and training; nutrition and school luncheons; construction of school buildings. *Two hours a week.* Spring term. Open to those only who have taken Course 4.

Ed 8. Child Study.—The physical child. Order of development of the mental powers; adolescence; adaptation of studies to the child. *Two hours a week.* Spring term. Open to those only who have taken Course 5.

ELECTRICAL ENGINEERING

Professor Ganong; Mr. Wittig

Ee 1a. Elements of Electrical Engineering.—This course traces the development of electrical engineering from the practical application of laws studied in physics. The work is taken up by lectures, text-book, and problems. *Two hours a week.* Fall term. Required of juniors in electrical engineering.

Ee 1b. Elements of Electrical Engineering.—A continuation of course Ee 1a, showing the application of fundamental principles to the construction of electrical machinery and to general engineering problems. *Three hours a week.* Spring term. Required of juniors in electrical engineering.

Ee 2b. Laboratory Work.—Electrical measurements, and the operation and testing of direct current generators and motors. This course illustrates the practical application of the work given in courses Ee 1a and b. *Two hours a week.* Spring term. Required of juniors in electrical engineering. The charge for this course is $2.00.

Ee 3a. Elements of Alternating Current Circuits.—A study of the conditions which arise in connection with the introduction of variable and alternating electric pressures, and the production of such pressures, measurements and calculations for the same. *Three hours a week.* Fall term. Required of seniors in electrical engineering.

Ee 3b. Alternating Current Machinery.—A continuation of course Ee 3a, taking up the application of the fundamental elements of alternating currents to the design, construction, and operation of apparatus and machinery; the study of polyphase apparatus in the generation, transmission, distribution, and utilization of power. *Four hours a week for the first nine weeks.* Spring term. Required of seniors in electrical engineering.

Ee 4a. Electrical Development.—A course on the design, construction, and cost of electro-magnets and clutches, electric heating apparatus, direct current generators and motors, and the general features of the design of alternating current machinery; the study of the insulation problem to meet the requirements of high electric pressures is also taken up, together with the discussion of modern electrical development. *Three hours a week.* Fall term. Required of seniors in electrical engineering.

Ee 5a. Design of Electrical Machinery.—This course is given in the drawing room, and is the practical application of the work in course Ee 4a. Calculations are made for electro-magnetic devices, and for direct current generators, involving a knowledge of the fundamental electrical principles of design, the principles of mechanical design, cost of materials and cost of labor, and the use of the student's judgment to fit particular circumstances and financial conditions. *Four hours a week.* Fall term. Required of seniors in electrical engineering.

Ee 5b. Design of Direct and Alternating Current Machinery.—A continuation of course Ee 5a. Drawing room work. *Four hours a week for thirteen weeks.* Spring term. Required of seniors in electrical engineering.

Ee 6a. Laboratory Work.—A continuation of course Ee 2b, taking up the testing of direct current apparatus and machinery, and alternating current measurements; investigation of power plant equipments and electric lighting. *Four hours a week.* Fall term. Required of seniors in electrical engineering. The charge for this course is $3.00.

Ee 6b. Laboratory Work.—A course showing the practical application of the work done in courses Ee 3a and b, and continuing the laboratory work of course Ee 6a, including the operating, testing, and experimental work with alternating current instruments, generators, motors, transformers, and rotary converters; and polyphase power measurements. *Four hours a week.* Spring term. Required of seniors in electrical engineering. The charge for this course is $2.50.

Ee 7b. Electrical Engineering.—A course in general engineering applications and practical problems, such as will be met with after the student leaves college, applying all the work and training of the course and the technical ability of the student. *Four hours a week, last nine weeks.* Spring term. Required of seniors in electrical engineering.

Ee 8b. Electrical Engineering Practice.—A course given for the expansion of laboratory work into the construction of laboratory apparatus and development of original ideas of the student; also for testing, repairing, or adjusting commercial electric plants. This course is designed and will be expanded to give the student an opportunity to apply his technical training and ability to actual engineering problems and difficulties. *Four hours a week, alternate weeks or as arranged for.* Spring term. Required of seniors in electrical engineering.

Ee 9a. Thesis Work.—The designing of electrical apparatus or original research work in which the student is particularly interested; and a clear, complete report of what has been accomplished. The organization of the work and the carrying out of the same is left almost entirely to the student, and is a measure of his energy and ability as an engineer. *Fall term and through the senior year, as arranged for.* Required of seniors in electrical engineering.

Ee 10a. Electrical Development and Application.—A course dealing with the fundamental electrical principles and their application to the production, distribution, and utilization of power from the standpoint of a mechanical engineer. *Three hours a week.* Fall term. Required of juniors in mechanical engineering.

Ee 10b. Alternating Current Development and Application.—An elective course for juniors or seniors in mechanical engineering, which continues the work taken up in course Ee 10a. The fundamental elements of alternating current measurements and calculations are studied; also the operation of alternating current generators, motors, and poly-

phase apparatus is treated from a mechanical engineer's point of view. *Two hours a week.* Spring term.

Ee 11a. Laboratory Work.—For mechanical engineers. Electrical measurements, and the operating and testing of direct current generators and motors, showing the practical application of the work taken up in course Ee 10a, and the work is arranged for the particular needs of the mechanical engineer. This course is open to chemical and civil engineering students who have previously elected one of the preliminary electrical courses. This course may be followed by the regular courses Ee 6a and b, by those wishing to become familiar with alternating current machinery. *Four hours a week.* Fall term. Required of seniors in mechanical engineering. The charge for this course is $3.00.

Ee 12b. Electrical Transmission and Distribution of Power.—An elective course for seniors in civil engineering, taking up the elements of electrical measurement, the generation, transmission, and utilization of power; covering the electrical feature of water power development. *Two hours a week.* Spring term.

ENGLISH

Professor Estabrooke; * Professor Thompson; Professor Wheeler; Mr. Prince; Mr. Daggett

Two credits in English are required for graduation. Courses 3 and 4, which are prescribed for freshmen, give 1 1-5 credits. The remaining 4-5 credit is regularly obtained by taking courses 1 and 2; but students especially interested in other courses in English may, upon consultation with the instructors, make certain substitutions (see under courses 6, 9, 17, and 18). Course 1 is regularly taken during the freshman year and course 2 during the sophomore year; however, upon sufficient grounds, either course may be postponed for one year.

Eh 1a and 2a. Public Speaking.—The purpose of this course is to give the student a practical knowledge of the fundamental principles of effective public speaking. The first term's work consists in voice training by means of practice work in classes, reading aloud for interpretation, and the acquirement of ease in pose and gesture. During the second term the training thus acquired will be applied to the delivery of model public orations, and especially to speeches of the student's own compo-

* Absent on leave.

sition. Special attention will be given to the correction of individual faults. Provided their other work is satisfactory, the eight students obtaining the highest grades in this course are chosen to compete in the sophomore prize declamations. During the first term the sections will meet *once a week;* during the second, *once in two weeks.* The assignment of sections is made by the instructor in the second week of the term.

Eh 2a and 2b. English Composition.—This course—to be taken throughout the sophomore year—supplements the work of the freshman year by giving further practice in narrative, expository, and argumentative writing. *Monthly themes are required,* each containing from 1,000 to 1,200 words. There will be a conference on each theme.

Eh 3. English Composition and Rhetoric.—This course gives both theoretical and practical instruction. The theory is taught by class-room work based on Espenshade's Composition and Rhetoric. The practice is obtained by exercises written in the class-room, and by weekly themes. The themes are criticized in detail by the instructor, and those falling below the standard must be rewritten. In addition to the study of the text-book and the writing and rewriting of themes, certain outside reading from standard authors is required. This course is prescribed for freshmen. *Three hours a week.* Fall term.

Eh 4. English Composition and Rhetoric.—Extended study of the forms of discourse; narration, description, exposition, and argumentation; construction of outlines, and practice in the different forms by exercises in the class-room and by weekly themes. The text-books are Cairn's Forms of Discourse, and Lewis's Specimens of the Forms of Discourse. This course is prescribed for freshmen. *Three hours a week.* Spring term.

Eh 5. Old English.—Elements of Old English grammar; reading of easy prose and poetry. Constant reference is made to the relation of old English to modern English and modern German. The text-book is Smith's Old English Grammar. *Three hours a week.* Given in the spring term of even years.

Eh 6. English Composition and Literature.—One two-page theme a week, and occasional longer themes, in connection with the study of selections from English prose writings. Among the writings studied will be selections from Addison, Swift, Johnson, Goldsmith, and Burke. *Two hours a week.* Fall term.

Eh 7. English Composition and Literature.—A continuation of course 6. Among the writings studied will be selections from Macaulay, Carlyle, Ruskin, Newman, Matthew Arnold, and Stevenson. *Two hours a week.* Spring term.

Courses 6 and 7 are open to those that have taken courses 3 and 4; and students especially interested in courses 6 and 7 may, upon consultation with the instructor, substitute them for courses 1 and 2.

Eh 8. English Literature.—The text-book, Pancoast's Introduction to English Literature, is supplemented by frequent lectures, and by study in the library. A few masterpieces are studied in detail. Attention is given to historical and social conditions, and the students are required to prepare essays upon the characters and times studied. *Three hours a week.* Fall term.

Eh 9. English Literature.—A continuation of course 8. The authors studied are chiefly Elizabethan dramatists. *Two hours a week.* Spring term.

Eh 10. English Literature.—A continuation of course 9. Study of Elizabethan writers completed. Study of writers of the Restoration. *Two hours a week.* Fall term.

Eh 11. American Literature.—Study of the most important American authors of the nineteenth century. The text-book is Bronson's American Literaure. *Three hours a week.* Spring term.

Eh 12. English Literature.—Study of the structure and qualities of the English novel. The text-book is Perry's Study of Prose Fiction. *Three hours a week.* Fall term.

Eh 13. English Literature.—A continuation of course 12. In this course selections from English novelists are read critically, in order to determine the characteristic qualities of each. At least one entire work of a selected author is carefully studied. *Two hours a week.* Spring term.

Eh 14. American Poets.—This course is designed to make the student acquainted with the more important American poets, especially with Poe, Bryant, Longfellow, Emerson, and Lowell. The text-book is Bronson's American Literature. *Three hours a week.* Given in the spring term.

Eh 15. Victorian Poets.—Tennyson, Browning, Rossetti, and Arnold. A study of selected poems, together with readings in the works of these poets and of contemporary poets. *Two hours a week.* Fall term.

Eh 17. Forensic Writing.—A course in the principles of written argumentation with a view to spoken debate. Lectures and written work. Open only to those who have taken courses 3 and 4, or an equivalent. *Two hours a week.* Fall term.

Eh 18. Oral Debate.—A course in application of the principles of argumentation to spoken debate. Lectures and class-room work. Open only to those that have taken course 17, or an equivalent. This course is not given unless elected by at least eight students. *Two hours a week.* Spring term.

Courses 17 and 18 may be substituted for courses 1 and 2.

Eh 19. Forms of English Poetry.—The study of the foot, the line, the stanza, the ballad, the sonnet, the ode, the epic, the metrical romance, etc. *Two hours a week.* Fall term.

Eh 20. English Romantic Poets.—A general view of the English Romantic Movement with some attention to the characteristics of the poetry that preceded this movement; a study of selected poems from the writings of Thomson, Collins, Gray, Cowper, and Burns. *Two hours a week.* Fall term.

Eh 21. English Romantic Poets.—A continuation of course 20. Study of selected poems from the writings of Wordsworth, Coleridge, Scott, Byron, Shelley, and Keats. *Two hours a week.* Spring term.

Eh 22. Advanced Public Speaking.—This course will give practical training in the principles of voice production, vocal interpretation of literature, extempore speaking, and the various problems of platform art. *Three hours a week.* Fall term. Open to all undergraduates.

Eh 23. Advanced Public Speaking.—A continuation of course 22. *Three hours a week.* Spring term.

FORESTRY

PROFESSOR TOWER

[NOTE.—Courses in forest botany are listed under biology.]

Fy 1. GENERAL FORESTRY.—The importance and scope of the subject; direct and indirect value of the forest; relation of the forest to the State; relation of forestry to the other sciences, and of the individual branches of forestry to each other; forestry in the United States. Optional for students who take forestry as a major. *Two hours a week.* Spring term.

Fy 4. FOREST MEASUREMENTS.—A continuation of course 10. *Two hours a week.* First half of spring term.

Fy 5. FOREST MEASUREMENTS, FIELD WORK.—A continuation of course 11. † *Four hours a week.* First half of spring term.

Fy 6. SILVICULTURE.—A study of the facts which concern forest growth in the relation of the tree to external influences; characteristics of the forest, and of the forest regions of the United States; systems of reproducing forests naturally; thinnings and improvement cuttings. To be taken in connection with course 8. Open to those who have taken courses 2, 3, 4 and 5. *Two hours a week.* Fall term.

Fy 7. SILVICULTURE.—A continuation of course 6. To be taken in connection with course 9. *Two hours a week.* Spring term.

Fy 8. SILVICULTURE, FIELD WORK.—Special studies and practical work in the forest. † *Eight hours a week, the first half of the fall term.*

Fy 9. SILVICULTURE, FIELD WORK.—A continuation of course 8. † *Eight hours a week, the last half of the spring term.*

Fy 10. FOREST MEASUREMENTS.—The determination of the contents of felled and standing trees and of the whole forest on a tract; methods of measurement in use in the United States; calculation of rate of growth; construction of volume and yield tables. To be taken in connection with course 11. *Two hours a week.* Fall term. Open to those who have taken Ms 1, 2, and 4.

Fy 11. FOREST MEASUREMENTS, FIELD WORK.—Practice in taking measurements, and office work in computing the results. † *Four hours a week.* Fall term.

Fy 12. Lumbering.—The industry considered from an economic standpoint; an account of the methods of lumbering in the different parts of the United States. In connection with this course the student is expected to spend two weeks in a lumber camp and prepare a written report on the operations of lumbering in that locality. *One hour a week.* Fall term. One-half credit is allowed for the time spent in the lumber camp and in preparing the report. Open to students taking forestry as a major subject.

Fy 13. Forest Management.—Financial and economic considerations; the normal forest; principles and preparation of working plans. *Two hours a week, the first half of the spring term.* Open to those who have taken courses 6, 7, 8, 9, 10, and 11.

Fy 14. Thesis Work.—The preparation of a thesis in forest managemen. † *Ten hours a week.* Spring term.

GERMAN

Professor Carr; Professor Lentz

Gm 1. Elementary German.—Bierwirth's Beginning German; Leander's Träumereien; Zschokke's Der Zerbrochene Krug; Storm's Immensee; Jacobsen's Wigo; Kraner's Der Tschokoi; Benedix's Der Prozess; elementary composition. *Five hours a week.* Fall term.

Gm 2. Elementary German.—A continuation of course 1. *Five hours a week.* Spring term.

Gm 3a. German Prose and Poetry.—Texts selected from the writings of nineteenth century authors. Easy assigned reading; composition; memorizing of German songs. *Three hours a week.* Fall term.

Gm 3b. German Prose and Poetry.—A continuation of course 3a. *Two hours a week.* Spring term.

Gm 4a. German Literature of the Classic Period of the Eighteenth Century.—Special attention will be devoted to the works and biographies of Lessing, Goethe, and Schiller. Assigned reading and reports. Open to students who have completed courses 5a and 5b. *Three hours a week.* Fall term.

Gm 4b. German Literature of the Classic Period of the Eighteenth Century.—A continuation of course 5a. *Three hours a week.* Spring term.

Gm 5a. General View of German Literature.—Klee's Grundzüge der deutschen Literaturgeschichte; the Nibelungenlied and Walther von der Vogelweide (both in modern German); assigned reading and weekly reports. Open to students who have completed courses 3a and 3b, or 4a and 4b. *Three hours a week.* Fall term.

Gm 5b. General View of German Literature.—A continuation of course 5a. *Three hours a week.* Spring term.

Gm 6a. Intermediate Composition and Conversation.—Bronson's Colloquial German. Open to students who have completed courses 1 and 2, or their equivalent. *Two hours a week.* Fall term.

Gm 6b. Intermediate Composition and Conversation.—Schrakamp's Conversational German. *Two hours a week.* Spring term.

Gm 7a. Advanced Composition and Conversation.—Fossler's Practical German Conversation. *Two hours a week.* Fall term.

Gm 7b. Advanced Composition and Conversation.—A continuation of course 7a. *Two hours a week.* Spring term.

Gm 8a. Middle High German.—Paul's Mittelhochdeutsche Grammatik; translation of mediaeval into modern German. Open to students who have completed courses 5a and 5b. *Two hours a week.* Fall term.

Gm 8b. Old High German.—Braune's Althochdeutsche Grammatik and Althochdeutsches Lesebuch; translation into modern German. *Two hours a week.* Spring term.

GREEK

Professor Huddilston

Gk 1. Xenophon.—Hellenica, Books I-IV. Study of syntax, and daily exercises in writing Greek. *Four hours a week.* Fall term.

Gk 2. Homer.—Odyssey, Books VI-XII. The reading of the remaining books, in English translation, is required. Assigned readings on the history of Greek poetry, "the Homeric question," and Homeric antiquities. *Four hours a week.* Spring term.

Gk 3. Attic Orators.—Some of the shorter orations of Demosthenes; selections from the minor Attic orators; parallel reading on the history of Greek prose literature, and the public economy and social life of Athens. *Two hours a week.* Fall term.

Gk 4. Greek Tragedy.—Euripides's Medea and Sophocles's Antigone. The reading of several other plays in English translation is required; also, parallel reading on the history of the Greek tragic drama. *Three hours a week.* Spring term.

Gk 5. Thucydides.—Book I. Assigned reading in Herodotus, and a comparative study of the three great historians of Greece. *Three hours a week.* Fall term. Open to students who have taken courses 1 and 3.

Gk 6. Aristophanes.—The Clouds and the Knights; lectures and collateral reading on the development of Greek comedy. *Two hours a week.* Spring term. Open to students who have taken courses 2 and 4.

Gk 7. Plato.—Selected dialogues. Lectures on the history of Greek philosophy with special reference to Plato and Aristotle. *Two hours a week.* Fall term. Open to students who have taken courses 3 and 5.

Gk. 8. Pindar.—The Olympian and Pythian Odes; supplementary reading on the history of Greek lyric poetry. *Two hours a week.* Spring term.

Gk 9. Greek Sculpture.—Lectures, illustrated by photographs and lantern slides. This course does not presuppose a knowledge of Greek, and is intended to serve as a general introduction to the history of the fine arts. The interdependence of the arts and their relation to the life of the Greeks, as well as their relation to the world's subsquent art, are emphasized. *Two hours a week.* Given in the fall term of odd years.

Gk 10. Greek Sculpture.—A continuation of course 9, including a study of Greek architecture. *Two hours a week.* Given in the spring term of even years.

Gk 11. New Testament Greek.—This course is intended for those who have no acquaintance with ancient languages, and, with course 12, is expected to give considerable facility in reading the narrative portions of the Greek Testament. It is open to all students. *Three hours a week.* Given in the fall term of even years.

Gk 12. New Testament Greek.—A continuation of course 11. Reading of the Gospels of John and Matthew; syntax. *Three hours a week.* Given in the spring term of odd years.

Gk 13. Greek Private Life.—Lectures, illustrated with lantern slides and photographs. Assigned reading. *Two hours a week.* Given in the fall term of even years.

Gk 14. Greek Religion.—A study of the chief divinities in ancient Greek religion. Lectures and assigned reading. Investigation of special topics by members of the class. *Two hours a week.* Given in the spring term of odd years.

Gk 15. Greek Prose Composition.—A course in writing Greek, intended to continue the work begun in Gk 1. *One hour a week.* Spring term.

Gk 18. Greek Prose Composition.—An advanced course consisting of the translation into Greek of narrative and rhetorical passages. *One hour a week.* Fall term.

Gk 19. Greek Prose Composition.—A continuation of course 18. *One hour a week.* Spring term.

For the accommodation of those students who have not presented Greek for entrance to college the two following courses in elementary Greek are offered.

Gk. 20. Elementary Greek.—The declensions, conjugations; Xenophon's Anabasis, Books I-II, and daily writing of Greek based on the text. *Five hours a week.* Fall term.

Gk 21. Xenophon and Homer.—Anabasis, Books III-IV; sight reading in Attic prose; selections from Homer's Iliad. *Five hours a week.* Spring term.

At 1. Italian Art.—The revival of the fine arts in Italy, with special reference to the history of painting in Tuscany and Umbria during the

early Renaissance. Lectures and collateral reading. The work is illustrated by a large and growing collection of photographs and casts. *One hour a week.* Given in the fall term of even years.

At 2. Italian Art.—A continuation of course 1, dealing chiefly with the masters of the high Renaissance in Florence and Rome. *One hour a week.* Given in the spring term of odd years.

At 3. Italian Art.—Painting in the north of Italy, and the culmination of the Italian Renaissance in the Venetian masters. Lectures and collateral reading. *One hour a week.* Given in the fall term of odd years.

At 4. Italian Art.—A continuation of course 3. *One hour a week.* Given in the spring term of even years.

HISTORY

Professor Fellows; Professor Colvin

Hy 1. Medieval History.—A general course covering the period from 395 to 1500 A. D. The disintegration of the Roman Empire; ecclesiastical institutions; feudalism; struggle between the papacy and the empire; rise of modern nations. Required of major students in history. *Three hours a week.* Fall term. Open to all students.

Hy 2. Modern History.—Continuation of course 1 to the present time. A rapid survey of the Reformation; the absolute monarchy in France; the French Revolution; the Napoleonic era; Europe in the nineteenth century. *Three hours a week.* Spring term. Open to all students.

Hy 3. History of England.—From early times to the beginning of the Stuart period. Especial attention is given to social and industrial conditions. *Two hours a week.* Fall term. 1906-7. Open to all students.

Hy 4. History of England.—Continuation of course 3. From the beginning of the Stuart period to the present. *Two hours a week.* Spring term. Open to all students.

Hy 5. History of Modern Continental Europe.—A general course from 1789 to 1815. *Two hours a week.* Fall term. 1907-8. Open to all students.

Hy 6. History of Modern Continental Europe.—A continuation of course 5, from 1815 to the present time. *Two hours a week.* Spring term. Open to all students.

Hy 7. History of the United States.—The period from 1783 to the beginning of Jackson's administration. This course will begin with a brief study of Colonial history from 1750. *Three hours a week.* Fall term. Open to all students.

Hy 8. History of the United States.—A continuation of course 7, through the Period of Reconstruction. *Three hours a week.* Spring term. Open to all students.

[The following courses are open only to advanced students.]

Hy 9. The Renaissance and the Reformation.—The period from 1300 to 1648 A. D. *Two hours a week.*

Hy 10. The Renaissance and the Reformation.—A continuation of course 9. *Two hours a week.*

Hy 11. History of Modern Continental Europe.—The period from the Peace of Utrecht to the fall of Napoleon I. *Three hours a week.*

Hy 12. History of Modern Continental Europe.—The period since the fall of Napoleon I. *Three hours a week.*

Hy 13. Industrial and Social History of England.—The medieval manor, town, guild, and foreign trade; Black Death and Peasants' Rebellion; breaking up of the medieval system; expansion of England; the industrial revolution; government control in the nineteenth century; and the growth of voluntary association. *Two hours a week.*

Hy 14. Historical Construction and Criticism.—*One hour a week.*

HORTICULTURE

Mr. Dorsey.

Ht 2. Principles of Fruit Growing.—A study of conditions and of methods of culture of orchard and small fruits. Lectures and text-book. *Two hours a week.* Spring term.

Ht 3. Laboratory Horticulture.—Practical work in orchard and gardens supplementing course 6. *Two hours a week.* Fall term.

Ht 4. General and Ornamental Gardening.—The culture of garden vegetables in the field and under glass; market and home gardening; propagation of plants; the principles of landscape art and their application to rural conditions; plans for improving home grounds. *Three hours a week.* Spring term.

Ht 5. Handicraft.—Practical work in greenhouse, gardens, and orchards. *Four hours a week.* Spring term.

Ht 6. Systematic Pomology.—Lectures and critical studies of the leading natural groups of fruit. Open to students who have taken Bl 21 and Ht 2. *Two hours a week.* Fall term.

Ht 7. Spraying.—A study of the materials used in spraying, spray machinery and the methods employed in combating plant diseases. Open to juniors and seniors. *One hour a week.* Spring term.

Ht 8. The Evolution of Cultivated Plants.—The origin, distribution, and variation of cultivated plants, and a discussion of the current hypotheses of organic evolution as applied to their modification; studies in heredity and improvement of types. Open to juniors and seniors. *Two hours a week.* Fall term.

Ht 9. Horticultural Experimentation.—Original work for those desiring to become teachers or investigators. Open to seniors or graduate sudents. *Time to be arranged.*

Ht 10. Greenhouse Construction and Management.—A study of the different greenhouse crops; forcing plants under glass; drawing plans of greenhouses; studying heating systems and methods of building. Elective. Open to juniors and seniors. *Two hours a week.* Fall term.

LATIN

Professor Chase

Lt 1. Livy and Composition.—Selections from Livy, History of Rome; composition, with review of Latin syntax. *Four times a week.*

Lt 2. Cicero and Horace.—Cicero, De Senectute; Horace, Odes and Epodes; Latin composition. *Four times a week.* Spring term.

Courses 1 and 2 are required of candidates for the B. A. degree who elect Latin.

Lt 3. Terence and Plautus.—The Andria, Adelphoe, or Phormio of Terence; the Captivi, Trinummus, or Menaechmi of Plautus; lectures on the development of Roman comedy. *Three times a week.* Fall term.

Lt 4. Tacitus and Cicero.—The Agricola and Germania of Tacitus; selected letters of Cicero. *Three hours a week.* Spring term.

Lt 6. Latin Composition.—Practice in writing Latin; study of Latin syntax. *One hour a week.* Fall term.

Lt 6. Latin Composition.—Practice in writing Latin; study of Latin rhetoric. *One hour a week.* Spring term.

Lt 7. Pliny and Tacitus.—Selected letters of Pliny the younger; readings in the Annals of Tacitus; the Roman Empire. *Two hours a week.* Given in the fall term of even years.

Lt 8. The Roman Elegiac Poets.—Selections from Catullus, Tibullus, Propertius, and Ovid; lectures on the elegiac poets. *Two hours a week.* Given in the spring term of odd years.

Lt 9. Roman Satire.—Selections from Ennius, Lucilius, Varro, Horace, Persius, Juvenal, Petronius; original research. *Two hours a week.* Given in the fall term of odd years. Open to students who have taken, or are taking, courses 3-4, or 7-8.

Lt 10. Roman Satire.—A continuation of course 9. *Two hours a week.* Given in the spring term of even years.

Lt 11. Roman Philosophy.—Lucretius (selections); Cicero (selections from the Academica, De Officiis, Tusculanæ Disputationes, De

Finibus, De Natura Deorum); Seneca (De Providentia, De Vita Beata); lectures on the history and development of ancient philosophy; original research. *Two hours a week.* Given in the fall term of even years. Open to students who have taken, or are taking, courses 3-4, or 7-8.

Lt 12. Roman Philosophy.—A continuation of course 11. *Two hours a week.* Given in the spring term of odd years.

Lt 13. Roman Literature.—General introduction to the subject; illustrative class-room readings; a choice of one of six courses of collateral reading of Roman authors. *Three hours a week.* Given in the fall term of even years. Open to students who have taken courses 1-4.

Lt 14. Roman Literature.—A continuation of course 13. *Three hours a week.* Given in the spring term of odd years.

Lt 15. Roman Rhetoric and Oratory.—Quintilian (selections from the Institutio Oratoria); Tacitus (Dialogus de Oratoribus); Cicero (selections from the Brutus, De Oratore, Orator); a study of sample orations of Cicero, and of some of the fragments of Roman oratory. *Two hours a week.* Given in the fall term of odd years. Open to students who have taken courses 1-4.

Lt 16. Roman Rhetoric and Oratory.—A continuation of course 15. *Two hours a week.* Given in the spring term of even years.

Lt 17a. Roman Topography.—Lectures on the development of the city of Rome and the present condition of its ancient ruins, preceded by a glance at the geography of the Italian peninsula. Illustrated by maps, photographs, and stereopticon views. *One hour a week.* Given in the fall term of odd years. Open to students who have taken courses 1-4.

Lt 17b. Roman Topography.—A continuation of course 17a. *One hour a week.* Given in the spring term of even years.

Lt 18. Roman Private Life.—Text-book work, supplemented by collateral reading and lectures upon some of the more important and interesting customs and institutions of Roman every-day life. *One hour a week.* Given in the fall term of odd years. Open to students who have taken courses 1-4.

Lt 19a. Latin Grammar.—A discussion of the fundamental principles of word form and syntax in the Latin language. Lectures and recitations. *One hour a week.* Given in the fall term of odd years.

Lt 19b. Latin Grammar.—A continuation of Lt 19a. *One hour a week.* Given in the spring term of even years.

Lt 20. Roman Epigraphy.—The principles of the science, and the interpretation of selected inscriptions. *One hour a week.* Given in the spring term of even years.

Lt 21. Rapid Reading of Latin.—Practice in reading without translation. Selections from various authors. Especially adapted for students expecting to teach the language. *One hour a week.* Spring term. Open only to students whose major subject is Latin.

MATHEMATICS AND ASTRONOMY

Professor Hart; Mr. Willard; Mr. Morley; Mr. Moots

Ms 1. Solid Geometry.—Solid and spherical geometry, including original demonstrations and the solution of numerical problems. The text-book is Bush and Clarke's Solid Geometry. *Five hours a week for ten weeks.* Spring term. Required of all freshmen in the B. A. courses, and of those in the B. S. courses who did not offer it for admission.

Ms 2. Algebra.—A brief review of the theory of exponents, quadratic equations, and the binomial theorem; indeterminate equations; logarithms, including practice in the solution of numerical exercises; undetermined coefficients; partial fractions; exponential and logarithmic series, and the computation of logarithms; permutations and combinations; theory of equations. The text-book is Hawke's Advanced Algebra. *Five hours a week.* Fall term, first fourteen weeks.

Ms 4. Plane Trigonometry.—The text-book is Crockett's Trigonometry. *Five hours a week.* Fall term, last four weeks; spring term, first eight weeks. Courses 2, 4, and either 1, 19, or 6a are required of all candidates for the Bachelor's degree.

Ms 5. Analytic Geometry.—A brief study of the point, right line, and conic sections. For students in other than engineering courses who

do not intend to elect mathematics beyond course 7. Open to students who have taken courses 2 and 4. The text-book is Wentworth's Analytic Geometry. *Two hours a week.* Fall term.

Ms 6a. Analytic Geometry.—A study of the point, line, and circle. Open to students who have taken courses 1, 2 and 4. The text-book is Ashton's Analytic Geometry. *Five hours a week.* Spring term, last ten weeks.

Ms 6b. Analytic Geometry.—A continuation of course 6a. Conic sections; elements of solid analytic geometry. *Five hours a week.* Fall term, first eight weeks.

Ms 7. Calculus.—Differentiation of the elementary forms of algebraic and transcendental functions; successive differentiation; differentials; integration of the elementary forms; integration between limits. Open to students who have taken courses 1, 2, 4, and either 5 or 6a and 6b. The text-book is Granville's Differential and Integral Calculus. *Five hours a week.* Fall term, last ten weeks.

Ms 8. Calculus.—A continuation of course 7. Integration as a summation; various methods of integration. Applications of differential and integral calculus. *Five hours a week.* Spring term.

Ms 9. Descriptive Astronomy.—The text-book is supplemented by informal lectures, and illustrated by lantern slides, the Trouvelot drawings of celestial objects, and work in the observatory. Open to students who have taken courses 1, 2, 4, and, preferably, Ps 1 and Ps 5. The text-book is Young's Manual of Astronomy. *Three hours a week.* Fall term.

Ms 10. Practical Astronomy.—A course arranged to meet the needs of engineering students, and consisting mainly of problems in the conversion of time, the determination of terrestrial latitudes and longitudes, and the establishment of meridian lines. The data for these problems are taken largely from the students' own observations, and the course is intended to emphasize the necessity of careful work in the field, as well as accurate and well arranged computations. The instruments employed are the sextant, artificial horizon, portable chronometer, theodolite, and vertical circle. Open to students who have taken courses 9, 4, and 19. *Three hours of recitations or lectures and two hours of observatory work a week.* Spring term.

Ms 11. Advanced Algebra.—Determinants and the solution of higher equations. Open to students who have taken courses 1, 2 and 4. *Three hours a week.* Spring term.

Ms 12. Advanced Integral Calculus.—A course based upon Byerly's Integral Calculus. Open to students who have taken courses 6, 7 and 8. *Three hours a week.* Given in the fall term of odd years.

Ms 13. Advanced Integral Calculus.—A continuation of course 12. *Two hours a week.* Given in the spring term of even years.

Ms 15. Differential Equations.—The text-book is Murray's Differential Equations. Open to students who have taken courses 7 and 8. *Two hours a week.* Given in the spring term of odd years.

Ms 16. Practical Astronomy.—The theory and use of the sextant, universal instrument, transit, and equatorial. Open to students who have taken courses 6, 7, 8, 9, 19, and, preferably, 10. *Three hours a week.* Given in the fall term of odd years.

Ms 17. Practical Astronomy.—A continuation of course 16. *Three hours a week.* Given in the spring term of even years.

Ms 19. Spherical Trigonometry.—A continuation of course 4, with additional problems and applications to spherical astronomy. *Two hours a week.* Fall term.

Ms 20. Solid Analytic Geometry.—A course based upon C. Smith's Solid Geometry. *Three hours a week.* Given in the fall term of even years.

MECHANICAL ENGINEERING

Professor Jewett; Mr. Gunn; Mr. Davee; Mr. Carter

Me 1. Woodwork.—A number of graded exercises in woodworking, designed to give the student familiarity with the tools used in modern woodworking practice, and also to teach him to work from dimensioned drawings. These exercises lead up to pattern making. The pattern work consists of making complete patterns and core boxes from drawings. A lecture course supplements the work in the shop. Charge for materials, $4.00. † *Four hours a week.* Fall term.

Me 2. Forge Work.—Forging; welding; tool dressing. A set of lathe tools and cold chisels for use in machine work is made by each student. Charge for material, $5.00. Cost of hammer, calipers and scale, about $2.50. The text-book used is Bacon's Forge Practice. † *Four hours a week.* Spring term.

Me 3. Mechanism of Machines.—Lectures supplementing the course in kinematics. Required of juniors in mechanical engineering. *One hour a week.* Fall term.

Me 4. Kinematics.—A study of motion in machine construction and the elements of machines, including links, gears and cams. The text-book is Schwamb and Merrill's Elements of Mechanism. *Three hours a week.* Spring term.

Me 5. Machine Work.—Exercises in filing and chipping; lathe work; exercises on planer, shaper and milling-machine; making of cut gears, machinist taps, etc. Charge for materials, $5.00 per term. † *Nine hours a week.* Fall term.

Me 5a. Machine Work.—A continuation of Me 5. † *Six hours a week.* Spring term.

Me 5b. Machine Work.—A shorter course than Me 5 and 5a, for electrical engineers. † *Four hours a week.* Fall and spring terms. Charge for material, $5.00 per term.

Me 6. Foundry Work.—Foundry instruction is given in moulding, mixing of metals, operation of cupolas, etc. The work is assigned in connection with Me 5, ten per cent of the hours registered for under Me 5 being applied to foundry work.

Me 7. Valve Gears.—The principal steam engine valve motions are studied in order to enable the student to gain a knowledge of the method of designing simple valve mechanisms. Special attention is given to designing valves by the use of the Zeuner diagram, with the solution of practical problems in the drawing-room. The text-book is Peabody's Valve Gears for Steam Engines. *Two hours a week.* Spring term.

Me 8. Machine Design.—This course is a continuation of Me 4. Its object is the study of advanced machine design with reference to the selection of materials, proportioning of parts, designing of fly wheels,

etc. In connection with this course the student will be required to design some machine. *Three hours a week.* Spring term.

Me 9. Materials of Engineering.—Metallurgy of iron, steel, copper and the principal alloys. Physical properties of materials discussed and investigated. *Two hours a week.* Spring term.

Me 10. Fuels.—Heating value, supply and distribution of various fuels; types of furnaces; methods of stoking. *Two hours a week.* Spring term.

Me 11. Steam Engineering.—The fundamental theories relating to the steam engine and other heat engines. *Three hours a week.* Fall term.

Me 12. Steam Boiler Design.—Complete design of some type of steam boiler, worked up in the drawing-room. † *Six hours a week.* Fall term.

Me 13. Hydraulic Machinery.—A brief lecture course on the elements of hydraulics, followed by the theory and design of the turbine and other water motors. *Two hours a week.* Fall term.

Me 14. Marine Machinery.—A course with text-book on types of machinery found on shipboard. The principal calculations necessary to a design are taken up in detail. *Three hours a week.* Fall term. Open to seniors.

Me 15. Mechanical Laboratory.—Testing materials, lubricants, steam boilers and engines, gasoline engines, etc. The charge for this course is $2.00 per term. † *Two hours a week for juniors,* spring term. † *Two hours a week for seniors.* Fall and spring terms.

Me 16. Steam Engineering.—A continuation of course 11, indicating the connection between theory and practice in steam engines, steam turbines, air compressors, refrigerating machines, and gas engines. *Two hours a week, first nine weeks.* Spring term.

Me 17. Steam Engine Design.—Detailed design of some type of steam engine, accompanying course 16. † *Six hours a week.* Spring term.

Me 18. Graphic Statics.—The principles of graphic statics and their application to problems of design. † *Four hours a week.* Spring term.

Me 19. Marine Engineering.—The problems of propulsion and propeller design are made to lead up to the final problem of designing a ship as a whole to fulfill given conditions. *Three hours a week.* Spring term.

Me 20. Heating and Ventilation of Buildings.—A lecture course. *One hour a week.* Spring term.

Me 21. Seminary.—General discussion of leading articles appearing in current engineering literature. *One hour a week.* Fall and spring terms.

Me 22. Thesis.—The results of some original investigation or design presented in proper form. The subject must be submitted before the close of the fall term, senior year.

Me 23. Elementary Naval Architecture.—A lecture course supplemented by notes on the displacement, stability, design, and construction of the hulls of marine vessels. *Three hours a week.* Spring term.

Me 24. Kinematical Drawing.—This course supplements Me 4. *Two hours a week.* Fall term.

Me 25. Strength of Materials by Test.—A course in the mechanical laboratory for civil engineers. A charge is $2.00 is made for this course. Elective. † *Two hours a week.* Spring term.

Me 26. Mechanical Laboratory.—A course of experiments in the laboratory especially arranged to meet the needs of the student in electrical engineering. A charge of $2.00 is made for this course. Elective. † *Three hours a week.* Spring term.

MECHANICS AND DRAWING

Professor Weston; Mr. Grover; Mr. Emery

Md 1. Drawing.—Instruction and practise in technical free-hand drawing and lettering, in the care of drawing instruments and their use in elementary problems involving straight lines and circles. The text-book is Anthony's Mechanical Drawing. † *Four hours a week.* Fall term.

Md 2. Mechanical Drawing.—The study and construction of geometrical problems, conic sections, and problems in projection, followed by practise in the conventional methods of representing surfaces and materials by means of section lines and water colors. The text-book is Anthony's Mechanical Drawing. † *Four hours a week.* Spring term.

Md 3. Descriptive Geometry.—Elementary problems; tangents, intersection of planes, cylinders, cones, spheres, etc. The time is divided between the recitation room and drawing room. The text-book is Church's Descriptive Geometry. *Two hours a week.* Fall term.

Md 4. Descriptive Geometry.—A continuation of course 3. *Two hours a week.* Spring term.

Md 5. Mechanics.—The fundamental principles of statics, kinematics, and kinetics, with applications to practical problems; exercises in finding centre of gravity and moment of inertia; the study of stresses and strains in bodies subject to tension, compression, and shearing; the common theory of beams, including shearing force, bending moment, and elastic curve; torsional stresses and theories of stress in long columns. The text-book is Maurer's Technical Mechanics, supplemented by lectures. *Five hours a week.* Fall term.

Md 6. Mechanics.—A continuation of course 5. *Five hours a week.* Spring term.

Md 7. Advanced Mechanics.—General principles of kinematics, statics, and kinetics; the mathematical theory of elasticity; the theory of the potential function, with applications to problems in gravitation, hydro-mechanics, etc. *Two hours a week.* Fall term.

Md 8. Advanced Mechanics.—A continuation of course 7. *Three hours a week.* Spring term.

Md 9. Methods of Drawing.—A continuation of course 2, including isometric projection, cabinet projection, and linear perspective; followed by instruction and practise in mechanical lettering, the design of titles, of working drawings, and the making of tracings and blue-prints. † *Four hours a week.* Fall term.

Md 10. Free-hand Drawing.—Free-hand pencil practise in the drawing of designs involving straight lines and curves, in lettering, in model drawing, and in pictorial perspective. A general course designed for non-engineering students. † *Four hours a week.* Fall term.

MILITARY SCIENCE AND TACTICS

PROFESSOR BROWN

Mt 1. MILITARY, FIRST YEAR'S COURSE.

(a) PRACTICAL:

1—U. S. Infantry Drill Regulations to include the School of the Battalion, Advance and Rear Guards, Outposts, Marches and Ceremonies.
2—Infantry Target Practice.
3—Field Service Regulations.
4—Guard Duty.

(b) THEORETICAL:

1—U. S. Infantry Drill Regulations to include the School of the Company.
2—Manual of Guard Duty.
3—Field Service Regulations.
4—Small Arms Firing Regulations.

Required of all students, except as provided on p. —. *Five hours, or the equivalent, a week, counting one credit.*

Mt 2. MILITARY, SECOND YEAR'S COURSE.

(a) PRACTICAL:

The same as course Mt 1 (a).

(b) THEORETICAL:

1—U. S. Infantry Drill Regulations, School of the Battalion, Advance and Rear Guards, Outposts, Marches and Ceremonies.
2—Records and Official Papers.
3—Small Arms Firing Regulations.

Open to all who have completed course 1. All will be non-commissioned officers. *Five hours, or the equivalent, a week, counting one credit.*

Mt 3. MILITARY, THIRD YEAR'S COURSE.

(a) PRACTICAL:

Duties consistent with rank in carrying out (a) in courses 1 and 2.

(b) THEORETICAL:

Assistant instructors over those taking course Mt 1 (b).

Open to all who have completed course 2. All will be officers, or non-commissioned officers. *Five hours, or the equivalent, a week, counting one credit.*

Mt 4. Military, Fourth Year's Course.

(a) Practical:

The same as for course Mt 3 (a).

(b) Theoretical:

Assistant instructors over those taking course Mt 2 (b).

Open to all who have completed course 3. All will be officers. *Five hours, or the equivalent, a week, counting one credit.*

Organization of Camp Battalion, October, 1906.

Major, commanding battalion—F. S. N. Erskine.
Captain and Adjutant—S. F. Pierce.
Captain and Quartermaster—S. M. Bird.

Co. "A," Captain—H. H. Rich.
First Lieutenant—J. S. Irish.
Second Lieutenant—E. C. Coleman.
First Sergeant—H. E. Hamlin.
Sergeants—C. L. Welsh, C. E. Stickney, J. N. Kane, C. W. Parsons.
Corporals—L. M. Ames, H. P. Carle.

Co. "B," Captain—L. W. Sargent.
First Lieutenant—H. M. Ellis.
Second Lieutenant—A. L. Todd.
First Sergeant—K. R. Fox.
Sergeants—R. Crocker, G. E. Springer.
Corporals—A. C. Porter and E. Tuell.

Co. "C," Captain—J. Jacobs.
First Lieutenant—B. I. Collins.
Second Lieutenants—A. G. Durgin, H. M. Bowman.
First Sergeant—F. G. Wadsworth.
Sergeants—E. S. Alton, E. G. Russell, H. Chadwick, J. G. Rose.
Corporal—H. M. Woods.

PHARMACY

Professor Jackman

Pm 1. Pharmaceutical Chemistry.—Chemical formulæ; principles, chemical reactions; chemical equations, with special reference to pharmaceutical processes. The text-book is Prescott and Johnson's Qualitative Chemical Analysis. *Five hours a week.* Fall term.

Pm 2. Pharmacy.—Pharmacopœias, dispensatories, etc.; weights and measures; specific gravity; pharmaceutical uses of heat; pharmaceutical arithmetic and problems; the chemical elements, official salts, their preparations; organic compounds, their official preparations; official drugs, their preparations; animal preparations; extemporaneous pharmacy; the principles of dispensing, etc. The text-book is Caspari's Pharmacy. *Five hours a week.* Fall term.

Pm 3. Laboratory Pharmacy.—Official preparations and tests. The operations of manufacturing pharmacy, including the preparation of granular and scale salts, infusions, syrups, tinctures, and other galenicals; official tests of chemicals, drugs, and preparations, for identity, strength and adulteration; drug assaying. The text-books are Caspari's Pharmacy and the U. S. Pharmacopœia. † *Twelve hours a week.* Fall term.

Pm 4. Pharmacopœia.—A complete review of the pharmacopœia, with special reference to the chemical and pharmaceutical principles involved in tests and preparations. The text-books are Caspari's Pharmacy and the U. S. Pharmacopœia. *Five hours a week.* Spring term.

Pm 5. Inorganic Pharmacognosy.—Nomenclature; practical exercises in the identification of specimens. The text-book is the U. S. Pharmacopœia. *Two hours a week.* Fall term.

Pm 6. Organic Pharmacognosy.—Nomenclature; habitat, etc.; practical exercises. The text-books are the U. S. Pharmacopœia and Maisch's Materia Medica. *Four hours a week.* Spring term.

Pm 7. Materia Medica.—Chemicals and drugs; their nature, uses, classification, therepeutic action, and doses; poisons, and antidotes. The text-book is Potter's Materia Medica. *Three hours a week.* Fall term.

Pm 9. Pharmacy Readings.—Current pharmacy literature; research and reference readings; abstracting; reports. † *Five hours a week.* Spring term.

Pm 10. Laboratory Pharmacy.—A continuation of course 3. † *Five hours a week.* Spring term.

Pm 11. Prescriptions.—Critical examination of prescriptions from actual files, with reference to inelegance, and to physiological, pharmaceutical, and chemical incompatibility; doses; methods and order of compounding, etc. The text-book is Ruddiman's Incompatibilities in Prescriptions. *Three hours a week.* Spring term.

PHILOSOPHY

Professor Fernald

Pl 1. Psychology.—Among the topics considered are sensation, structure and functions of the brain, conditions of neural activity, consciousness, attention, conception, discrimination, association, memory, imagination, perception, reasoning, instinct, emotions and sentiments, will as volition, will as choice, and will in relation to character. The text-book is James's Psychology (Briefer Course). *Three hours a week.* Fall term.

Pl 2. Logic.—The object of this course is to give the student a just appreciation of the functions of language as a means of expressing thought, and a familiarity with the principles of deductive and inductive reasoning. The student is given frequent drills in the application of logical principles. The text-book is Ryland's Logic. *Three hours a week.* Spring term.

Pl 3. History of Philosophy.—An outline of Greek and medieval philosophy. *Three hours a week.* Offered in the fall term of odd years.

Pl 4. History of Modern Philosophy.—Presupposes Pl 3. *Three hours a week.* Spring term of even years.

Pl 5. Comparative Psychology.—The psychology of man and of the higher animals compared. A study of other minds than ours with reference to sense-experience, instinct and intelligence, association of ideas, memory, perception of relations, the power to reason, and the emotions. *Two hours a week.* Given in the spring term of even years. Open to juniors and seniors who have taken course 1.

Pl 6. Advanced Psychology.—Besides special topics in general psychology, this course is designed to include a discussion of such phenomena as sleep and dreams, the hypnotic state, thought transference, illusions and hallucinations. *Two hours a week.* Given in the spring term of odd years. Open to juniors and seniors who have taken course 1.

Pl 8. Experimental Psychology.—This course deals with mental processes from the standpoint of experimental study, and seeks to develop the power of introspection of these processes by modern experimental methods. † *Two hours a week.* Fall or spring term; the same course

is given each term. Open to students taking course 1, or who have taken course 1, to the limit of the psychological laboratory.

Pl 9. Problems of Philosophy.—This course should be preceded by Pl 3 and Pl 4. *Two hours a week.* Fall term of even years.

Pl 10. Advanced Laboratory Psychology.—Experimental and research work. † *Two hours a week.* Spring term. Open to students who have taken course 8.

Pl 11. Ethics.—Theoretical and practical ethics. A lecture course. *Two hours a week.* Given in the fall term of even years. Open to students who have taken course 1.

PHYSICS

Professor Stevens; Mr. Ham; Mr. Bearce

[Note.—For students who are specializing in this department the time indicated for the various laboratory courses may be extended.]

Ps 1. General Physics.—Lectures on the dynamics of solids, liquids, and gases; sound and light; experiments before the class; problems. *Five hours a week.* Fall term. Open to students who have taken Ms 4.

Ps 2. General Physics.—A continuation of course 1; heat and electricity. *Five hours a week.* Spring term.

Ps 3. Elementary Physics.—A non-mathematical course, covering the ground of course 1. The recitations are supplemented by lectures and experimental demonstrations. *Four hours a week.* Spring term.

Ps 5. Laboratory Physics.—The subjects usually included in an under-graduate course. Special attention is given to the reduction of observations, and the tabulation of results. †*Four hours a week.* Spring term. Open to students who have taken either course 1 or course 12.

Ps 6. Laboratory Physics.—A brief course for students who have taken Ps 3. † *Two hours a week.* Spring term.

Ps 7. Optics.—Lectures in continuation of course 1, based chiefly upon Preston's Light and Drude's Optics. *Three hours a week.* Spring term. Open to students who have taken Ms 8.

Ps 8. Mathematical Physics.—A course in mathematical physics is offered each year. The subject varies. *Two hours a week.* Fall term. Open to students who have taken Ms 8.

Ps 9. Mechanics and Heat.—Advanced laboratory work in continuation of course 5. † *Six hours a week, or four hours a week.* Fall term.

Ps 10. Optics.—Advanced laboratory work in continuation of course 5. † *Four hours a week.* Spring term.

Ps 11. Electrical Measurements.—Advanced laboratory work in continuation of course 5. The charge for this course is $2.50. † *Six hours a week.* Fall term.

Ps 12. General Physics.—A course covering the ground of course 1, with more attention to the experimental and historical aspects, and less to the mathematical. The text-book is Aldous's Physics. *Five hours a week.* Fall term.

Ps 14. Theory of Electrical Instruments.—Lectures on the mathematical theory of instruments, and the methods of eliminating errors. *One hour a week.* Fall term.

Ps 15. Special Laboratory Course.—A course open to students who have completed courses 9, 10 and 11. A subject is assigned for original investigation, or the work of a published research is repeated. † *Four hours a week.* Fall term.

Ps 16. Special Laboratory Course.—A continuation of course 15. † *Six hours a week.*

Ps 18. Electricity and Optics.—Advanced laboratory work in continuation of course 5. † *Four hours a week.* Fall term.

ROMANCE LANGUAGES

Professor Segall; Mr. Shute

Rm 1. French.—Elementary course. Grammar, translation, composition, pronunciation, dictation. Bruce, Grammaire Française; Syms, Reader; Verne, Une Ville Flottante; Dumas, Le Comte de Monte-Cristo; Labiche, Moi; Erckmann-Chatrian, Waterloo; Vigny, Cinq-Mars. *Five hours a week.* Fall term.

Rm 2. FRENCH.—A continuation of course 1. *Five hours a week.* Spring term.

Rm 3a. FRENCH.—For students who have taken courses 1 and 2, or their equivalent. Translation, retranslation, pronunciation, dictation, word-study, idioms. Readings from French history; short stories; Sandeau, Mlle. de la Seiglière; About, La Mère de la Marquise and La Fille du Chanoine; Hugo, Quatre-vingt-treize. *Three hours a week.* Fall term.

Rm 3b. FRENCH.—A continuation of course 3a. *Two hours a week.* Spring term.

Rm 4a. FRENCH.—For students who have taken courses 3a and 3b, or their equivalent. Translation, retranslation, pronunciation, dictation, word-study, idioms. Lamartine, Histoire de la Gironde (selections); Luquiens, Places and Peoples; Balzac, Eugénie Grandet and selected stories; Taine, L'Ancien Régime. *Three hours a week.* Fall term.

Rm 4b. FRENCH.—A continuation of course 4a. *Three hours a week.* Spring term.

Rm 5a. FRENCH.—For students who have taken at least courses 1 and 2, or their equivalent. Conversation, composition; elementary course. Bacon, Une Semaine à Paris; Bruno, Le Tour de la France; Foncin, Le Pays de France; Chardenal, Advanced French Exercises. *Two hours a week.* Fall term.

Rm 5b. FRENCH.—A continuation of course 5a. *Two hours a week.* Spring term.

Rm 6a. FRENCH.—For students who have taken courses 4a and 4b. Rapid reading of recent novelists. *Two hours a week.* Fall term.

Rm 6b. FRENCH.—A continuation of course 6a. *Two hours a week.* Spring term.

Rm 7a. FRENCH.—For students who have taken courses 5a and 5b. Conversation, composition; advanced course. *Two hours a week.* Fall term.

Rm 7b. A continuation of course 7a. *Two hours a week.* Spring term.

Rm 9a. SPANISH.—Elementary course. Loiseaux, Grammar; Worman, First and Second Spanish Books; Ramsey, Spanish Reader; Loiseaux, Spanish Composition; Alarcón, Novelas Cortas Escogidas; Miguel Ramos Carrion y Vital Aza, Zaragüeta. *Three hours a week.* Fall term.

Rm 9b. SPANISH.—A continuation of course 9a. *Three hours a week.* Spring term.

Rm 10a. SPANISH.—For students who have taken courses 9a and 9b, or their equivalent. Monsanto and Languellier, Spanish Course; Galdós, Marianela, Electra; Valera, El Comendador Mendoza. *Two hours a week.* Fall term.

Rm 10b. SPANISH.—A continuation of course 10a. *Two hours a week.* Spring term.

Rm 11a. ITALIAN.—An elementary course, elective for students who have completed course 2. Grandgent, Italian Grammar. Bowen, First Italian Readings. *Three hours a week.* Given in the fall term of odd years.

Rm 11b. ITALIAN.—A continuation of course 11a. Grandgent, Italian Composition; Goldoni, La Locandiera; De Amicis, Cuore; Manzoni, I Promessi Sposi. *Three hours a week.* Given in the spring term of even years.

ORGANIZATION OF THE UNIVERSITY

The University is divided into colleges, each offering several courses upon related subjects. The colleges are interdependent and together form a unit. The organization is as follows:

College of Arts and Sciences
- The Bachelor of Arts Courses
- The Bachelor of Science Courses
- The Summer Term

College of Agriculture
- The Agricultural Course
- The Extension Courses

College of Technology
- The Chemical Course
- The Chemical Engineering Course
- The Civil Engineering Course
- The Mechanical Engineering Course
- The Electrical Engineering Course
- The Mining Engineering Course
- The Forestry Course

College of Pharmacy
- The Pharmacy Course
- The Short Course in Pharmacy

College of Law

The Agricultural Experiment Station

GENERAL STATEMENT

The College of Arts and Sciences, the College of Agriculture, the College of Technology, and the College of Pharmacy offer four years' courses leading to the appropriate bachelor's degree. They have the following common requirements for graduation:

1. English, one year, five hours a week, or the equivalent divided between two years.

2. Mathematics, one year, five hours a week.

3. Science (Chemistry, Physics, or Biology), one year, five hours a week, of which time an important part must be occupied with laboratory work.

4. Language (Greek, Latin, German, French), the equivalent of one year, five hours a week. The requirement for Latin is fulfilled by completing Lt 1 and Lt 2; and in Greek by completing Gk 1 and Gk 2. A student beginning German or French must receive at least two credits in the subject to count it toward a degree.

5. Military Science and Tactics, one year, five hours a week.

The science requirement demands a year's work in some one science, and is not fulfilled by fractions of a year's work in two or more sciences. In making up the language requirement, work done in preparation for college may be counted, but two years' preparatory study will be reckoned as one year of college work.

Twenty-five credits (one credit is given for a recitation course that meets five hours a week, or for a laboratory course that meets ten hours a week, for one half year), are required for graduaton in the College of Arts and Sciences; thirty credits are required for graduation in the College of Technology, the College of Agriculture, and the College of Pharmacy.

COLLEGE OF ARTS AND SCIENCES

FACULTY OF INSTRUCTION

GEORGE EMORY FELLOWS, PH. D., L. H. D., LL. D.
President of the University
† JAMES STACY STEVENS, M. S. *Dean and Professor of Physics*
† MERRITT CALDWELL FERNALD, PH. D., LL. D.
Professor of Philosophy
ALFRED BELLAMY AUBERT, M. S. *Professor of Chemistry*
* ALLEN ELLINGTON ROGERS, M. A. *Professor of Civics*
† JAMES NORRIS HART, C. E., M. S.
Professor of Mathematics and Astronomy
FREMONT LINCOLN RUSSELL, B. S., V. S. *Professor of Biology*
† HORACE MELVYN ESTABROOKE, M. A. *Professor of English*
JOHN HOMER HUDDILSTON, PH. D. *Professor of Greek*
GILMAN ARTHUR DREW, PH. D. *Professor of Biology*
RALPH KNEELAND JONES, B. S. *Librarian*
JACOB BERNARD SEGALL, PH. D.
Professor of Romance Languages
† GEORGE DAVIS CHASE, PH. D. *Professor of Latin*
† CAROLINE COLVIN, PH. D. *Professor of History*
CHARLES DAVIDSON, PH. D. *Professor of Education*
JOSEPH WILLIAM CARR, PH. D. *Professor of Germanic Languages*
ROBERT JAMES SPRAGUE, PH. D.
Professor of Economics and Sociology
WALTER STEVENS BROWN
Professor of Military Science and Tactics
MAX CARL GUENTHER LENTZ
Assistant Professor of Germanic Languages
* GUY ANDREW THOMPSON, M. A. *Assistant Professor of English*
GEORGE RUFUS WHEELER, M. A.
Acting Assistant Professor of English
† EUGENE LOUIS RAICHE *Instructor in French*
† WILLIAM MORTON BARROWS *Instructor in Botany*

* Absent on leave.
† Gives instruction in the Summer Term.

HENRY MARTIN SHUTE, M. A.
Instructor in Romance Languages
MARSHALL BAXTER CUMMINGS, M. S. *Instructor in Botany*
HARLEY RICHARD WILLARD, M. A. *Instructor in Mathematics*
RAYMOND KURTZ MORLEY, M. A. *Instructor in Mathematcs*
WALTER EVERETT PRINCE, M. A. *Instructor in English*
WILLIAM ROSS HAM, B. A. *Instructor in Physics*
PERCY LORING REYNOLDS, M. D.
Physical Director and University Physician
RALPH LOWE SEABURY, B. S.
Instructor in Biological and Agricultural Chemistry
ELMER EARL MOOTS, B. C. E. *Instructor in Mathematics*
WINDSOR PRATT DAGGETT, PH. B. *Instructor in Public Speaking*
FLORENCE BALENTINE, B. A. *Tutor in Biology*
HENRY WALTER BEARCE, B. S. *Tutor in Physics*

GENERAL INFORMATION

THE COLLEGE OF ARTS AND SCIENCES comprises:
The Bachelor of Arts Courses
The Bachelor of Science Courses
The Summer Term.

The aim of this college is to furnish a liberal education, and to afford opportunity for specialization along literary, philosophical, and general and special scientific lines. Each student must select in some one department, work to be pursued three or four years, five recitations a week. Any one of the following departments may be chosen for major work: Biology (including zoölogy, botany, physiology, and entomology), chemistry, civics, English, German, Greek, history, Latin, mathematics and astronomy, psychology (including education), physics, Romance languages (including French, Spanish, and Italian).

In many cases the selection of a major subject need not be made before the beginning of the sophomore year. A student may change his major subject with the consent of the professors in charge of the department which he leaves and the one which he wishes to enter; but no student will be graduated who has not finished all the work required for graduation in some one department, no matter how much work he may have done in other departments. The major subject must include work counting not less than six, nor more than eight credits. In the case of departments in which less work is offered than amounts to six credits, this amount must be made up from such other related departments as

the professor under whose direction the major is taken may prescribe. The remainder of the student's work may be selected from any department or departments of the University. This must be done with the advice of the head of the department in which the student has chosen his major subject, that it may bear some useful relation to his other work.

THE BACHELOR OF ARTS COURSES

Students in the College of Arts and Sciences who have met the entrance requirements, and have taken a year's Latin or Greek in college, are candidates for the degree of Bachelor of Arts. This represents the minimum amount of work that must be taken in the classical languages. Opportunity is offered the student to take special work in Greek or Latin or both during his course.

Upon the completion of one year's prescribed graduate work in residence, or two years' in absence, including the presentation of a satisfactory thesis and examination at the University, he receives the degree of Master of Arts.

THE BACHELOR OF SCIENCE COURSES

These courses are arranged for those who seek a broad general training, based largely upon the study of some one subject as a major, with the remainder of the work selected from the wide range of subjects offered at the University.

At graduation the student receives the degree of Bachelor of Science. Upon the completion of one year's prescribed work in residence, or two years' in absence, including the presentation of a satisfactory thesis and examination at the University, he receives the degree of Master of Science.

No outline of the courses in the College of Arts and Sciences is given in the catalog, but students may have such an outline presented to them by applying to the professor in charge of the department in which they are interested. Groups of studies may be made up which would be desirable for students intending to prepare for teaching, or to enter upon the study of law, medicine, or theology.

THE SUMMER TERM

General Information

The summer term of the University of Maine is not a summer school, but so far as is practicable the work is coördinate with that of the remainder of the year. The majority of the courses offered are of

college grade and, when completed, the student receives full credit on the university books. There are no examinations for admission, and students are permitted to enter any class in which they can satisfactorily carry on the work. Before counting this work toward a collegiate degree, the college entrance conditions must be met.

Three classes of students may be benefited by the work of this term:

1. Teachers in the high schools and grammar schools who wish to fit themselves for more advanced positions. A small expenditure of time and money in the summer vacation may be the means of securing a more desirable position. School superintendents are coming to discriminate in favor of those teachers who advance in their work.
2. College students who may wish to get ahead in their course, or who may have back work to make up. A student should be able to make one credit (the equivalent of a five hours' study for eighteen weeks) during the summer term.
3. Courses in physics, chemistry, mathematics, and Latin are offered covering the work of the high school. In this way a student who is slightly deficient at the end of the school year may prepare himself for college. These courses give no credit on the University books. So far as possible the recitations are placed in the forenoon and the special lectures in the evening, leaving the afternoons free for study and recreation.

Courses of Instruction in the Summer Term

Botany

Mr. Barrows:

1. Field Botany. This course will deal with the kinds, habits, and habitats of plants about the University, including short excursions to several outlying regions for collecting and identifying species in field and forest. Attention will also be given to methods of pollination, modes of migration, association and mutual benefits of flowers and insects, and other factors of environment, such as light, heat, soil, water, gravity, and the effects of other plants. There will be a few lectures, some reference reading, and a small amount of laboratory work confined mostly to rainy days.
2. Laboratory Botany. A course designed primarily for teachers and dealing with laboratory methods. Exercises will be given in collecting and preserving material of different kinds in different ways. Considerable time will be devoted to life, based on the phenomena of absorption and movement of

experimental work on the physics and physiology of plant solutions, transpiration, respiration, carbon assimilation, and reproduction. Attention will also be given to the teaching of botany in secondary schools.

Chemistry

Dr. Bedford:

Organic Chemistry. The aliphatic series. Recitations and lectures, illustrated by specimens. Equivalent to course Ch 7 of the catalog. Text-book: Remsen's Organic Chemistry.

Chemical Preparations. The preparation and purification of organic and inorganic compounds. Equivalent to course Ch 12. Text-book: Auburt's Organic and Inorganic Preparations.

Quantitative Analysis. Gravimetric analysis of simple compounds. Equivalent to Ch 16. Text-book: Appleton's Quantitative Chemical Analysis or Quantitative Analysis by Clowes and Coleman.

Volumetric Analysis. Including acidimetry, alkalimetry, oxidimetry, iodimetry, etc. Equivalent to Ch 19 minus Assaying. Text-book: Schimpf's Essentials of Volumetric Analysis.

Toxicology and Urinalysis. A short course in the determination of the more common poisons and the analysis of urine. Equivalent to Ch 21. Text-book: Aubert's Urinalysis and Toxicology.

English

Professor Estabrooke:

1. English composition and Rhetoric. The work in this course is similar to that of the fall term of the freshman year in the University. It consists of the study of text-books, discussions of principles and methods, and practice in writing. The written work, whch is based largely upon the personal observations and experiences of the student, is discussed before the class in order to give practical illustration of principles and methods. Teachers will obtain from this course a familiarity with the methods of teaching English composition followed in the University, and special effort will be made to meet their needs. The text-book used will be Espenshade's Composition and Rhetoric.
2. English Prose. A study of the style and substance of selected writings from the works of English prose writers of the Nineteenth Century. Among the writers dealt with will be Macaulay, Carlyle, Ruskin, Newman, Matthew Arnold, and

Stevenson. There will be frequent written reports on the reading assigned, the purpose of the reports being to give practice in writing and to encourage the student toward intelligent interpretation and appreciation of what he reads.

3. English Poetry. A careful and appreciative study of selected poems from the writings of English poets of the early part of the Nineteenth Century. Among the writers dealt with will be Wordsworth, Coleridge, Byron, Shelley, and Keats. An attempt will be made to determine the characteristic merits of the poets studied and to show the relation of these poets to the time in which they lived.

An additional course in Shakespeare (a careful reading of a few of the best plays) will be given, if there is sufficient demand.

Should teachers so desire meetings will be appointed for the discussion of problems of teaching English in the schools.

French

Mr. Raiche:

1. An elementary course for beginners covering the work done in one year in preparatory schools and in one-half year in college. The books used will be: Chardenal's Complete French Course. For reading and translation, "Sans Famille." (D. C. Heath & Co.) There will also be some elementary French prose composition based on the text read.
2. A more advanced course for those who have studied French in college or preparatory school. The books to be used are: Frazer and Squair's French Grammar (D. C. Heath & Co.), Hugo's La Chute, Augier's Le Gendre de M. Poirier (D. C. Heath & Co.).

German

Professor Chase:

1. Elementary Course. Harris's German Lessons, Huss's German Reader, Storm's Immensee. Intended for students who are deficient in college entrance requirements in German.
2. Advanced Course. Covering part of the work in reading and composition usually done in the second year in German. Lessing's Minna von Barnhelm, Harris's German Composition.
3. A lecture course in Germanic literature. These lectures will be of a popular nature and will be open to the public.

History

Professor Colvin:

1. Modern England. Political and social development of England from the accession of the Stuarts to the reform of 1832.
2. The Civil War and Reconstruction. The causes and effects of the Civil War in America, with some discussion of the condition of the country during the great struggle.
3. Foreign relations of the United States. History of United States diplomacy since the establishment of the Federal Constitution.

Latin

Professor Chase:

The needs of the teacher of preparatory Latin will receive special attention; text-books, methods, matter, and manner in preparatory teaching of classics will be handled in weekly conferences. The University possesses a large collection of lantern slides and photographs, and these as well as the other extensive aids for classical instruction will be at hand for the examination and use of students.

1. Virgil. Reading of portions of the Æneid with the double purpose of covering the ground for the needs of college entrance requirements, and for the methods available for high-school teachers. Discussion of matter pertaining to Virgilian literature, helps for instruction, the epic style, and other topics that assist in making an appreciative understanding of Virgil.
2. Cicero. Selected orations, including the four against Catiline. Prose composition and syntax so far as time permits will form a feature of this course.

Mathematics

Professor Hart:

Three or more of the following courses will be given, depending upon the number of candidates indicating their desire to elect them.

1. Plane Trigonometry. The solution of right and oblique plane triangles, and of problems in surveying, together with the use of surveying instruments. No text-book will be required for this course, but those having logarithmic tables should bring them, and also any modern text-book on trigonometry, which will be useful for reference.

2. Solid Geometry. This course is offered especially for the benefit of students who intend to enter college, but who have not been able to complete the requirements in solid geometry. Wentworth's Solid Geometry will probably be used as the text-book, but Philips and Fisher's, Wells's, and other books will be used for reference.
3. College Algebra. The theory of quadratic equations, the binomial theorem and so much of the regular freshman course in algebra as time will permit. Text-book to be selected at the opening of the term.
4. Analytic Geometry. A brief course covering the elements of this subject.

Nature Study

Professor Hurd:

At the last session of the Maine Legislature the committee on education recommended that "Nature Study" or "Elementary Agriculture" be taught in the normal schools of the State. In a short time this work will no doubt be required in many of the public schools. Recognizing the value of the subject, and wishing to coöperate in this movement, the University will offer at its summer session a course for teachers which will familiarize them with the principal phases of the subject and help them to carry on such work when called upon to do so. The grounds, land, animals, and other equipment of the University will be used in an illustrative way. Briefly stated the following are some of the topics treated:

Plants:

General Structure. Function and relation of the different parts. Conditions necessary to plant growth. Seed selection and germination. How plants may be improved. Classification and uses of several principal plants used in the industrial world.

Soils:

Origin and compositon. Uses. Physical and chemical characteristics. Improvement of soils. Soil exhaustion.

Animals:

Relation of animal life to plant life and other forms of nature. Importance of domestic animals in our daily life. Structure, food, habits, and development of our domestic animals.

Plant Diseases, Insects, and Weeds:

The causes, nature of, and common remedies for plant diseases. Friendly and injurious insects and ways of controlling them.

A study of the weeds common to the neighborhood and best methods of eradicating.

School Gardens:

A study of the school garden movement of this and other countries. The planning, laying out, and caring for school gardens, putting into practice the principles studied relating to the plant and the soil.

Improvement of School Grounds:

Grading the grounds, making the lawn, selection, arrangement, planting, and caring for trees, shrubs, and flowers, and general methods of procedure.

Nature Economics:

A history and discussion of some of the more important crops and their influence on the industrial and social life of the country. The presentation of such topics in an interesting way to children.

Pedagogy

Professor Fernald:

Two courses are offered.

1. The Principles of Pedagogy and School Management.
2. History of Education.

Under No. 1, among the topics considered are: the principles of psychology applied to the art of teaching; the order in which the several powers of the mind become active, their development at different school periods, and hence the order of studies based thereon; the principles and methods of teaching; the recitation, its objects and methods; testing by questions, by topics; school incentives; the art of governing; school administration and management and psychical facts applied to moral training. This course is designed to aid the teacher in his effort to attain higher efficiency in the class-room and in the practice of the teacher's art.

Under No. 2, the aim is to develop, for present and future service, an educational science based on the clear and definite teachings of the past. Accordingly, the educational system, methods, theories, and practices of the leading historic nations are studied, with a view of determining what errors of the past to avoid, and what successful methods and practices to adopt. Finally, a brief comparative study is made of the school systems of the present more advanced nations, especially of those of Germany, France, England, and the United States.

The special text-books recommended are: White's Principles of Pedagogy, White's School Management, and Seeley's History of Education, all published by the American Book Company.

Physics

Professor Stevens:

1. An elementary laboratory course.
   This includes the list of experiments adopted by the Maine colleges for admission in physics.
2. Advanced course.
   Any laboratory course offered in the University may be taken by students in the summer term who are properly qualified.
3. A series of experimental lectures on general physics.
   The grade of the work in this course will be determined by the preparation of the students electing it.

Lectures, 1906

Hon. W. W. Stetson, State Superintendent of Schools: Some Educational Problems.
Professor Stevens: Modern Theories of Matter.
Professor Estrabrooke: Some Characteristics of Poetry.
Librarian Jones: How to use a Library.
Professor Chase: Spelling Reform.
Professor Colvin: The Algeciras Treaty.
Mr. and Mrs. Raiche: French Reading—*Le Duel.*

Vesper Services

A brief religious service is conducted each Sunday afternoon at 4.00 P. M. in the Art Building. This consists of a song service and a brief address.

Library

Throughout the summer term the University library of 27,000 volumes and the reading room containing about three hundred periodicals and the Maine daily papers, will be open from 9.00 A. M. to 12 M., and from 2.00 to 5.00 P. M. daily, excepting Sunday, and Saturday afternoon.

The library privileges ordinarily accorded to University students, including the home use of books, will be extended to students in the summer courses.

Laboratories, Museums, and Observatory

The laboratories belonging to the departments of physics, chemistry, and botany will be available for use of the students. In the physical

laboratory there is ample provision for carrying on the various courses from the preparatory work to that of the graduate student in the University. All necessary apparatus is supplied to the student without charge.

In the chemical laboratory a small charge is made to cover the cost of the articles used. The department is well equipped with modern apparatus.

The botanical laboratory is in charge of the professor of biology. The student is furnished with microscope, specimens, and preparations for advanced work.

The museum is illustrative of the rocks and fauna of Maine, and will be open at stated periods for the use of the students.

The observatory contains an eight-inch telescope, vertical circle, and other instruments of precision. The work of the observatory will be explained by Professor Hart in an evening lecture.

Expenses

Tuition for the term of five weeks, covering all charges for instruction in any number of courses that the student may elect, use of library and laboratories, except a small additional fee for those taking laboratory chemistry:

For residents of Maine, $10.00.

For residents of other states, $15.00.

Board and room in any of the University buildings, including light, and necessary furniture, $20.00 for the term, payable in advance.

Recreation

Most of the class work is held during the forenoon, leaving the afternoon and evening free for study and recreation.

On the campus are several excellent tennis courts. The neighboring country affords many attractive excursions, on foot, by bicycle, carriage, or electric cars. Maine's famous seaside resort, Bar Harbor, is but one and one-half hours distant by rail, while Mount Kineo and Moosehead Lake are at only a slightly greater distance and easily accessible.

Within easy riding or wheeling distance are Lakes Pushaw and Chemo, as well as several attractive mountains.

In General

Prospective students are invited to consult Dean Stevens, who is in charge of the Summer session, or any of the other instructors, for further details regarding any of the courses, or upon any subject relating to the work. It is the wish of the authorities to offer such courses as will

best appeal to the teachers of Maine and others who desire to avail themselves of these privileges.

If there should be a considerable demand for other studies than those named, arrangements will be made to provide for them as far as practicable. In case the registration for any course offered falls below a certain minimum, it may be withdrawn. The list of instructors and the courses outlined in this catalog were for the summer of 1906. Unimportant changes are likely to be made for the coming term.

THE COLLEGE OF AGRICULTURE

FACULTY OF INSTRUCTION

GEORGE EMORY FELLOWS, PH. D., L. H. D., LL. D.
President of the University

WILLIAM DANIEL HURD, B. S.
Acting Dean and Professor of Agronomy

ALFRED BELLAMY AUBERT, M. S. *Professor of Chemistry*

JAMES NORRIS HART, C. E., M. S.
Professor of Mathematics and Astronomy

FREMONT LINCOLN RUSSELL, B. S., V. S. *Professor of Biology*

HORACE MELVYN ESTABROOKE, M. A. *Professor of English*

GILBERT MOTTIER GOWELL, M. S.
Professor of Animal Industry

GILMAN ARTHUR DREW, PH. D. *Professor of Biology*

RALPH KNEELAND JONES, B. S. *Librarian*

WALTER STEVENS BROWN
Professor of Military Science and Tactics

JACOB BERNARD SEGALL, PH. D.
Professor of Romance Languages

JOSEPH WILLIAM CARR, PH. D.
Professor of Germanic Languages

CHARLES PARTRIDGE WESTON, C. E., M. A.
Assistant Professor of Mechanics and Drawing

MAX CARL GUENTHER LENTZ
Assistant Professor of Germanic Languages

ARTHUR WITTER GILBERT, M. S.
Assistant Professor of Agronomy

GEORGE RUFUS WHEELER, M. A.
Acting Assistant Professor of English

ARCHER LEWIS GROVER, B. S. *Instructor in Drawing*

HENRY MARTIN SHUTE, M. A.
Instructor in Romance Languages

MARSHALL BAXTER CUMMINGS, M. S. *Instructor in Botany*

HARLEY RICHARD WILLARD, M. A. *Instructor in Mathematics*

RAYMOND KURTZ MORLEY, M. A. *Instructor in Mathematics*

MATTHEW HUME BEDFORD, PH. D. *Instructor in Chemistry*

WALTER EVERETT PRINCE, M. A. *Instructor in English*
PERCY ANDERSON CAMPBELL, M. S. A.
Instructor in Animal Industry
PERCY LORING REYNOLDS, M. D.
Physical Director and University Physician
RALPH LOWE SEABURY, B. S.
Instructor in Biological and Agricultural Chemistry
ELMER EARL MOOTS, B. C. E. *Instructor in Mathematics*
WINDSOR PRATT DAGGETT, PH. B.
Instructor in Public Speaking
MAXWELL JAY DORSEY, B. S. *Instructor in Horticulture*
FLORENCE BALENTINE, B. A. *Tutor in Biology*

GENERAL INFORMATION

The College of Agriculture comprises the departments of Agronomy, Animal Industry, and Horticulture, and includes courses in nearly all of the natural sciences, agricultural chemistry, biological chemistry, veterinary science, and bacteriology. The aim of the College is to prepare young men to become farmers, teachers of agriculture and sciences in schools and colleges, investigators of agricultural subjects in the United States Department of Agriculture, experiment station workers, and practical men.

The courses of instruction are organized as follows:

1. THE REGULAR COURSES:
   - The four years general course in Agronomy, Animal Industry, and Horticulture
   - The special courses in Agronomy, Animal Industry, and Horticulture
   - The two years School Course in Agriculture
   - The short winter courses in Agronomy, Animal Industry, and Horticulture
   - The two weeks course in Poultry Management and Horticulture
2. THE EXTENSION COURSES:
   - The Correspondence courses
   - The Lecture courses

THE COLLEGE COURSES

The college courses are designed for those who wish to follow agriculture, animal husbandry, or horticulture as a business, or who purpose to become teachers or investigators in related sciences. The instruction

is arranged with a view to emphasize fundamental principles and to give the student the largest amount of technical knowledge consistent therewith. To this end the theoretical instruction is associated with practical work and observation on the farm, in the orchard and garden, and in the various laboratories of the university; but time is not consumed in merely manual operations.

Certain studies are fundamental to all work in agricultural lines and these are included among the subjects required in the four-year courses. After these fundamental subjects are completed, opportunity for election is given.

The following course, embracing 30 credits, is the required course for four years agricultural students. It is recommended that the subjects be taken in the order stated in the course. The elective subjects are selected with the advice of the major instructor.

The General Course in Agronomy, Animal Industry, and Horticulture

FRESHMAN YEAR

Fall Term		*Spring Term*	
Subject	Hours	Subject	Hours
Ag 1, Agronomy	2	An 1, Animal Industry	2
Ag 2, Lab. Agronomy †2	1	An 2, Lab. Animal Industry †2	1
Bl 1 and 2, Biology	3	Bl 9, Physiology	2
Ch 1 and 3, Chemistry	3	Bl 21 and 22, Botany	3
Eh 1 and 3, English	4	Ch 2 and 4, Chemistry	4
Md 1, Drawing †4	2	Eh 1 and 4, English	4
Mt 1, Military †5	2½	Mt 1, Military †5	2½
	17½		18½

SOPHOMORE YEAR

Fall Term		*Spring Term*	
Ag 3, Agronomy †4	2	Ag 4, Agronomy	2
An 3, Animal Industry	2	Bl 15, Veterinary Science	2
Ch 14, Chemistry †8	4	Eh 2, English	1
Eh 2, English	1	Ht 2, Horticulture	2
Modern Language	3	Modern Language	2
Ms 2, Mathematics	5	Ms 1 and 4, Mathematics	5
		Elective	6
	17		20

JUNIOR YEAR

Fall Term		*Spring Term*	
Ag 5, Agronomy	3	An 5, Animal Industry	2
An 4, Animal Industry	2	An 6, Lab. An. Industry † 4	2
Ch 29, Agricultural Chemistry	5	Bl 17, Bacteriology († 10 hrs. wk., 9 w.)	2½
Ht 3, Horticulture † 2	1	Ch 30, Biological Chemistry	5
Ht 6, Horticulture	2	Ht 4, Horticulture	3
Modern Language	3	Ht 5, Horticulture † 4	2
Elective	2	Modern Language	2
		Elective	1½
	18		20

SENIOR YEAR

Fall Term		*Spring Term*	
Ag 6, Agronomy, or		Ag 7, Agronomy, or	
An 7, Animal Industry, or		An 8, Animal Industry, or	
Ht 6 or 8, Horticulture	3	Ht 9, Horticulture	2
Thesis	3	Bl 15, Veterinary Science	2
Elective	14	Thesis	3
		Elective	13
	20		20

The following subjects are included in a major in Agriculture:

Ag 1 to 6, Agronomy	2	credits
An 1 to 7, Animal Industry	2	credits
Bl 15, Veterinary Science	4-5	credit
Ch 29, Agricultural Chemistry	1	credit
Ch 30, Biological Chemistry	1	credit
Ht 1 to 5, Horticulture	2	credits
Total	8 4-5	credits

At graduation the student receives the degree of Bachelor of Science. Upon the completion of one year's prescribed work in residence, or two years' in absence, including the presentation of a satisfactory thesis and examination at the University, he receives the degree of Master of Science.

The Special Courses in Agronomy, Animal Industry, and Horticulture

The Special Courses are designed for young men who cannot well spend four years in preparing themselves to become farmers, but who wish to secure special training in certain agricultural subjects. No fixed schedule of studies is prescribed, but students may elect along the line of horticulture, or dairying, or general farm crops and farm management.

For admission to this course applicants must be at least eighteen years of age, and must have a good common school education. No formal entrance examinations are required, but students will be admitted, upon recommendation of the Dean after the professor in charge of the work elected shall have satisfied himself of the fitness of each candidate to take the studies desired.

The annual expenses for courses of one year or more are the same as those of students in the four years' courses. *Tuition is free.*

The Two Years' School Course in Agriculture

This is a course designed to train young men and women who wish to become practical farmers, farm superintendents, dairymen, or gardeners, but who cannot devote time to high school or college training.

The same equipment is used and the same instructors give the work as in the four years' University course, but the work is of a more elementary nature. All the classes are separate and distinct from the four year classes, and in no case will college credit be allowed for work done in the school course.

There are no entrance examinations required of those who desire to enter the school course. Students over fifteen years of age who are prepared for advanced grammar or high school work are eligible for registration. No tuition is charged in this course but the same registration and incidental fees of fifteen dollars a term, or thirty dollars a year, are charged school course students in agriculture as are charged all others attending the University.

The practical side of the work in this course is strongly emphasized, and since students are expected to be able to *do* work and handle men when they have finished, those taking this course are required to spend the summer vacation between the first and second years in work at the college, for which reasonable wages will be paid, or on some farm approved by the faculty.

On completion of the course a certificate is awarded those who have satisfactorily done the work.

The following is a schedule of the work as given:

FIRST YEAR

Fall Term	*Spring Term*
Farm Crops and Farm Mechanics	Farm Crops and Farm Mechanics
Animal Industry	Animal Industry and Dairy Work
Orchard and Garden	Garden and Orchard
English	English
Business Arithmetic and Farm Accounts	Veterinary Science
Carpentry	Forge Work

SECOND YEAR

Fall Term	*Spring Term*
Farm Crops and Farm Mechanics	Farm Crops and Farm Mechanics
Animal Industry	Animal Industry
Orchard and Garden	Insects
Farm Chemistry	Farm Forestry
Farm Botany	Veterinary Science
English	English

The Winter Courses

The winter courses in Dairying and General Agriculture are designed for practical farmers who wish some training which will enable them to be better farmers, fruit growers, dairymen, or poultrymen, but who cannot leave the farm at other seasons of the year. These courses also help fit men to be managers of farms, creameries, or cheese factories.

Special emphasis is given to dairying and if the course is pursued two terms and two seasons' satisfactory work is performed in a butter or cheese factory, the student will be granted a certificate of proficiency. These courses begin on the Tuesday following the Christmas recess and continue eight weeks.

The subjects of farm crops, fertilizers, orcharding, gardening, dairying, and butter making, stock breeding and feeding, poultry raising, and veterinary science, are treated in the most practical manner. Very few text-books are used, and the expenses for board and room, which are the only other expenses, are very moderate.

The Two Weeks Course in Poultry Work and Horticulture

On the first Tuesday in April the special course in Poultry Work and Horticulture will commence.

The poultry instruction is conducted to aid persons who wish for practical knowledge in conducting this line of work. Most of the time is devoted to the handling of incubators and brooders; the care and

feeding of young chicks; and caring for the laying birds. Two lectures are given each day and discussions are held on poultry subjects.

The equipment available for instruction consists of three thousand laying and breeding birds, forty incubators, one hundred and twenty brooders, and such buildings as are the outcome of the poultry investigations at Maine Experiment Station.

The work in horticulture supplementing the above will be a study of orchard culture, vegetable gardening, spraying, plant diseases, grafting, and improving the home grounds.

The Correspondence Courses

The object of these courses is to give, directly in the home, the best training in practical agriculture, horticulture, and animal industry that can be given by this method of teaching. The courses are given by means of text-books, and free publications, either furnished by the college or procured from the U. S. Department of Agriculture, or the various Experiment Stations. The text-books are furnished at cost. The courses are free, and may be studied by individuals or granges, and other organizations may form Reading Clubs for study. Full information will be furnished upon application.

The following courses are offered:

Course 1. Farm Crops, and Crop Production
Course 2. Farm Management, Farm Machinery, and Field Engineering
Course 3. Feeding and Breeding of Farm Animals and Dairying
Course 4. Poultry Management
Course 5. Fruit Growing and Vegetable Gardening
Course 6. Forestry
Course 7. Home Economics
Course 8. Nature Study

The Lecture Courses

The College of Agriculture will send members of the faculty to speak at Grange meetings, Farmers' Institutes and other gatherings if the traveling expenses of the lecturer are paid by those holding the meeting. A circular giving the names of the lecturers and the subjects on which they will speak will be sent on application.

Besides the Correspondence and Lecture Courses, the College of Agriculture welcomes all kinds of correspondence on practical farm topics. If information is desired along lines related to crops, fertilizers, dairy work, feeding, or orcharding and gardening, the various instructors are ready to give such assistance as they may be able.

THE COLLEGE OF TECHNOLOGY

FACULTY OF INSTRUCTION

GEORGE EMORY FELLOWS, PH. D., L. H. D., LL. D.
President of the University
ALFRED BELLAMY AUBERT, M. S. *Professor of Chemistry*
JAMES NORRIS HART, C. E., M. S.
Professor of Mathematics and Astronomy
FREMONT LINCOLN RUSSELL, B. S., V. S. *Professor of Biology*
HORACE MELVYN ESTABROOKE, M. A. *Professor of English*
JAMES STACY STEVENS, M. S. *Professor of Physics*
GILMAN ARTHUR DREW, PH. D. *Professor of Biology*
RALPH KNEELAND JONES, B. S *Librarian*
JACOB BERNARD SEGALL, PH. D.
Professor of Romance Languages
HAROLD SHERBURNE BOARDMAN, C. E.
Professor of Civil Engineering
GORDON EDWIN TOWER, B. S., M. F. *Professor of Forestry*
WALTER KIERSTED GANONG, B. SC.
Professor of Electrical Engineering
ARTHUR CRAWFORD JEWETT, B. S.
Professor of Mechanical Engineering
JOSEPH WILLIAM CARR, PH. D.
Professor of Germanic Languages
WALTER STEVENS BROWN
Professor of Military Science and Tactics
CHARLES PARTRIDGE WESTON, C. E., M. A.
Assistant Professor of Mechanics and Drawing
MAX CARL GUENTHER LENTZ
Assistant Professor of Germanic Languages
GEORGE RUFUS WHEELER, M. A.
Acting Assistant Professor of English
ARCHER LEWIS GROVER, B. S *Instructor in Drawing*
HENRY MARTIN SHUTE, M. A. *Instructor in Romance Languages*
MARSHALL BAXTER CUMMINGS, M. S. *Instructor in Botany*
HARLEY RICHARD WILLARD, M. A. *Instructor in Mathematics*
RAYMOND KURTZ MORLEY, M. A. *Instructor in Mathematics*
EVERETT WILLARD DAVEE *Instructor in Wood and Iron Work*

MATTHEW HUME BEDFORD, PH. D. *Instructor in Chemistry*
THOMAS McCHEYNE GUNN, B. S., M. A.
Instructor in Mechanical Engineering
WALTER EVERETT PRINCE, M. A. *Instructor in English*
WILLIAM ROSS HAM, B. A. *Instructor in Physics*
PERCY LORING REYNOLDS, M. D.
Physical Director and University Physician
RALPH LOWE SEABURY, B. S.
Instructor in Biological and Agricultural Chemistry
CHARLES BARTO BROWN, C. E. *Instructor in Civil Engineering*
ELMER EARL MOOTS, B. C. E. *Instructor in Mathematics*
WINDSOR PRATT DAGGETT, PH. B. *Instructor in Public Speaking*
HARRY ALVAH EMERY, B. S. *Instructor in Civil Engineering*
CHARLES JENKINS CARTER *Instructor in the Machine Shop*
GUSTAV FREDERICK WITTIG, B. S., E. E.
Instructor in Electrical Engineering
FLORENCE BALENTINE, B. A. *Tutor in Biology*
HENRY WALTER BEARCE, B. S. *Tutor in Physics*

GENERAL INFORMATION

The College of Technology provides technical instruction in chemistry, and in various branches of engineering, including forestry. The number of credits required for graduation in this college is thirty. In such technical courses it is necessary to prescribe a large proportion of the work; but some elective studies may be chosen in the junior and senior years. Under each of the courses described below is given a tabulated statement of the subjects pursued and the amount of work required. The college comprises:

The Chemical Course
The Chemical Engineering Course
The Civil Engineering Course
The Mechanical Engineering Course
The Electrical Engineering Course
The Mining Engineering Course
The Forestry Course

At graduation in any of these courses the student receives the degree of Bachelor of Science. The diploma indicates which course has been completed.

THE CHEMICAL COURSE

This course is designed for those who plan to become professional chemists and analysts, or teachers of chemistry. Attention is given to preparation for the work of the agricultural experiment station.

Lectures and recitations are closely associated with practical work in the laboratories. The student is drilled in the use of chemical apparatus, in accurate observation, and in careful interpretation of directions.

Eleven credits are required for the completion of the major, and a total of thirty for graduation.

Requirements for Graduation

Freshman Year

Fall Term		*Spring Term*	
Subject	Hours	Subject	Hours
Rm 3a, French	3	Rm 3b, French	2
Eh 3, English Composition and Rhetoric	3	Eh 4, English Composition and Rhetoric	3
Ms 2, Algebra	5	Ms 4, Trigonometry	3
Ch 1, General Chemistry	2	Ms 6a, Analytical Geom.	2
Ch 3, Lab. Chemistry † 2	1	Ch 2, General Chemistry	3
Md 1, Drawing † 4	2	Ch 4, Lab. Chemistry † 2	1
Eh 1, Public Speaking	1	Eh 1, Public Speaking	1
Mt 1, Military † 5	2½	Mt 1, Military † 5	2½
	19½		17½

Sophomore Year

Fall Term		*Spring Term*	
Gm 1, German	5	Gm 2, German	5
Ps 12, General Physics	5	Ps 5, Lab. Physics † 4	2
Ch 5, Advanced Inorganic Chemistry	2	Ch 6, Advanced Inorganic Chemistry	3
Ch 14, Qualitative Analysis † 8	4	Ch 15, Qualitative Analysis † 8	4
Eh 2, Themes	1	Eh 2, Themes	1
Bl 1, 2, General Biology	3	Elective	2
	20		17

Junior Year

Fall Term		*Spring Term*	
Gm 3a, German	3	Gm 3b, German	3
Ch 16, 18, Quant. Anal. † 12	6	Ch 8, Organic Chemistry	2
Ch 7, Organic Chemistry	3	Ch 19, Volumetric Analysis and Assaying † 15	7½
Ch 30, Biological Chemistry	5	Elective	6
Elective	2		
	19		18½

SENIOR YEAR

Fall Term		*Spring Term*	
Ch 12, Chemical Preparations.....		Ch 24b, Industrial Chemistry...	2
Ch 20, Agricultural Analysis.....	† 14..... 7	Ch 28, Dyeing...	
Ch 21, Toxicology Urinalysis.....		Ch 22, Thesis...	† 15..... 7½
Ch 23, Organic Chemistry.....	3	Ch 25, Technical Analysis	
Ch 24a, Industrial Chemistry...	2	Bl 9, Physiology.....	2
Bl 13, Geology.....	3	Ch 13, Chemical Equations....	2
Elective	5	Elective	5
	20		18½

At graduation the student receives the degree of Bachelor of Science. Upon the completion of one year's prescribed work in residence, or two years' in absence, including the presentation of a satisfactory thesis and examination at the University, he receives the degree of Master of Science.

The Chemical Engineering Course

This course is especially designed for those who intend to enter industries that require a more or less extensive knowledge of chemistry, as well as of applied mathematics and some of the engineering studies, thus fitting them for positions as chemists or managers of manufacturing plants.

SOPHOMORE YEAR

Fall Term		*Spring Term*	
Subject	Hours	Subject	Hours
Ps 1, General Physics.....	5	Ps 2, General Physics.....	3
Ch 5, Adv. Inorganic Chemistry	2	Ps 5, Lab. Physics † 4.....	2
Ch 14, Qualitative Analysis † 6..	3	Ch 6, Adv. Inorganic Chemistry	3
Me 3, Drawing † 2.....	1	Ch 15, Qualitative Analysis † 6	3
Ms 6b, Anal. Geom. (12 weeks)	3	Ce, Plane Surveying.....	2
Ms 7, Calculus (6 weeks).....	2	Ce 7, Field Work † 3.....	1½
Me 7, Valve Gears.....	2	Ms 8, Calculus.....	5
Eh 2, Themes	1	Eh 2, Themes.....	1
	19		20½

JUNIOR YEAR

Fall Term		*Spring Term*	
Gm 2a, German	5	Gm 3b, German	5
Ch 16 and 18, Qualitative Analysis † 10	5	Ch 8, Organic Chemistry	2
Ch 7, Organic Chemistry	3	Ch 19, Volumetric Analysis and Assaying † 12	6
Me 5, Mechanics	5	Ce 10, Hydraulics	3
Ee 9, Dynamos	2	Me 4, Kinematics	3
		Me 15, Mechanical Lab'y † 2	1
	20		20

SENIOR YEAR

Fall Term		*Spring Term*	
Ch 12, Chem. Preparations Ch 20, Agricultural Anal.. Ch 25, Technical Anal....	† 12 6	Ch 24b, Industrial Chemistry.. Ch. 25, Technical Anal Ch 20, Thesis Work.. Ch 28, Dyeing.....	2 † 14.. 7
Ch 24a, Industrial Chemistry	2		
Ce, Hydraulic Field Work † 3	1½	Me 15, Mechanical Lab'y † 2	1
Me 9, Mat. of Engineering or Metallurgy?	2	Me 18, Structures † 4 or	2
Me, Steam Engineering	3	Me 20, Heating and Ventilation (1)	
Me 15, Mechanical Lab'y † 4	2	Me 5, Shop Work † 4	2
Ee 10, Dynamo-Lab'y † 2	1		
Elective	2	Elective	3
	19½		17

The Civil Engineering Course

The course in Civil Engineering has for its object the laying of a firm foundation in the theoretical and practical principles upon which the profession depends, so that on graduation the student may be fitted to apply himself at once to engineering work.

Especial attention is given to mathematics, mechanics, drawing, and the care and use of engineering instruments; at the same time care is taken to include those subjects that tend to broaden the mind and form the basis of a liberal education.

It is impressed upon the student that the scope of civil engineering is so broad that he may never expect to become expert in all its branches, and that on completion of his course he should obtain a position in that branch which seems best suited to him, so that he may begin to obtain experience and judgment, without which he can never become success-

ful. Students are encouraged to work during the summer months in engineering lines.

The methods of instruction are recitations, lectures, original problems, work in the testing laboratories, field practice, and designing, including the making of original designs and the preparation of the necessary drawings. Effort is made to acquaint the student with the best engineering structures, and with the standard engineering literature.

The engineering building contains recitation rooms, designing rooms, testing laboratories, drawing rooms, a filing and reference room, and instrument rooms, and is well equipped with apparatus.

The following studies constitute the regular four years course. It is seen that beginning with the junior year the student is allowed to elect a certain part of his work from any department in the University, with the consent of his major instructor.

Requirements for Graduation

FRESHMAN YEAR

Fall Term		*Spring Term*	
Subject	Hours	Subject	Hours
Ch 1, Chemistry	2	Ch 2, Chemistry	3
Ch 3, Lab. Chemistry † 2	1	Ch 4, Chemistry † 2	1
Eh 1, Public Speaking	1	Eh 1, Public Speaking	1
Eh 3, English Composition	3	Eh 4, English Composition	3
Md 1, Drawing † 4	2	Md 2, Drawing † 4	2
* Modern Language	3	* Modern Language	2
Ms 2, Algebra	5	Ms 4, Trigonometry / Ms 6a, Analytic Geometry	5
Mt 1, Military Drill † 5	2½	Mt 1, Military Drill † 5	2½
	19½		19½

SOPHOMORE YEAR

Fall Term		*Spring Term*	
Md 9, Drawing † 4	2	Ce 1, Surveying	2
Ce 5, Highway Eng	1	Ce 2, Surveying (fld. wk.) † 6	3
Ce 18, Sanitary Science	1	Eh 2, English Composition	1
Eh 2, English Composition	1	Md 4, Descriptive Geometry	2
Md 3, Descriptive Geometry	2	Modern Language	2
Modern Language	3		

* Students beginning a new language must take a five hour course the first year, which will complete the modern language requirements. In this case Eh 3, English Composition, will be taken in the sophomore year.

Ms 6b, Analytic Geom }		Ms 8, Calculus	5
Ms 7, Calculus }	5	Ps 2, Physics	3
Ps 1, Physics	5	Ps 5, Physics † 4	2
	20		20

JUNIOR YEAR

Fall Term		*Spring Term*	
Ce 3, Railroad Curves, etc	3	Ce 7, Drawing, 9 wks. † 6 h	1½
Ce 4, Railroad Fld. Wk. † 6	3	Ce 9, Summer School	3
Ce 7, Drawing, 9 wks., † 6 h	1½	Ce 10, Hydraulics	3
Md 5, Mechanics	5	Ce 19, R. R. Engineering	2
Elective	6	Md 6, Mechanics	5
		Ce 21, Structures	2
		Elective	2
	18½		18½

SENIOR YEAR

Fall Term		*Spring Term*	
Ce 11, Hydraul. Fld Wk. † 4	2	Ce 13, Structures	5
Ce 12, Structures	3	Ce 15, Designing † 15 for 10 wks.	4
Ce 14, Designing † 10	5	Thesis	
Ce 20, Masonry Construction	2	Elective	8
Elective	5		
	17		17

At graduation the student receives the degree of Bachelor of Science. Upon the completion of one year's prescribed work in residence, or two years' work in absence, including the presentation of a satisfactory thesis and examination at the University, he receives the degree of Master of Science. Three years after graduation, upon the presentation of a satisfactory thesis and proofs of professional work, he may receive the degree of Civil Engineer.

The Mechanical Engineering Course

The prescribed studies in this course have been chosen with the object of giving the student a fundamental engineering training such as shall enable him successfully to enter any one of the many lines of work in the field of mechanical engineering, and at the same time to form the basis of a liberal education. Therefore the required work covers a wide range of subjects in both technical and general work, as appears in the list given below.

Thorough instruction in pure and applied mathematics, physics, and mechanics is given to prepare the student to deal with the problems of his profession. The work in drawing and descriptive geometry commences in the freshman year and continues throughout the course, especial attention being given to arranging, lettering, and dimensioning the drawing so as to conform to the best practice.

The design, construction, and operation of steam boilers and engines is taught by courses in machine design, thermodynamics, fuels, valve gears, steam boiler design, and steam engine design. Tests of steam boilers, steam and gas engines, etc., are made and studied during the senior year. Courses in surveying, hydraulics, and hydraulic machinery are open to the student. The production of materials used in construction is studied and their properties verified by tests in the mechanical laboratories. A working knowledge of electrical machines is given by lectures in the class-room and practice in the laboratory. During the senior year an option in marine engineering is offered, giving an opportunity for the student to specialize in the steam engineering work involved in ship propulsion.

This class-room work is supplemented by extensive courses in woodwork and pattern making, forging, machine tool work, and foundry practice.

Detailed descriptions of the subjects in the following list of required work may be found under "Courses of Instruction."

Requirements for Graduation

FRESHMAN YEAR

Fall Term	Hours	*Spring Term*	Hours
Ch 1, Chemistry	2	Ch 2, Chemistry	3
Ch 3, Chemistry Lab. † 2	1	Ch 4, Chemistry Lab. † 2	1
Eh 1, English	3	Eh 1, English	1
Eh 3, English	1	Eh 4, English	3
* Modern Language	3	* Modern Language	2
Md 1, Drawing † 4	2	Md 2, Drawing † 4	2
Ms 2, Algebra	5	Ms 4, Trigonometry	3
Mt 1, Military † 5	2.5	Ms 6a, Analytical Geometry	2
		Mt 1, Military † 5	2.5
	19.5		19.5

* Students beginning a new language must take a five hours course the first year, which will complete the modern language requirements. In this case Eh 3, English Composition, will be taken in the sophomore year.

SOPHOMORE YEAR

Eh 2, Themes	1	Eh 2, Themes	1
Md 3, Descriptive Geometry	2	Md 4, Descriptive Geometry	2
Md 9, Drawing †4	2	Ps 2, Physics	3
Ms 6b, Analytic Geometry	3	Ps 5, Physics Lab. †4	2
Ms 7, Calculus	2	Ms 8, Calculus	5
Ps 1, Physics	5	Modern Language	2
Modern Language	3	Me 2, Forge Work †4	2
Me 1, Wood Work †4	2	Me 4, Kinematics	3
	20		20

JUNIOR YEAR

Ee 9, Elect. Eng	3	Md 6, Mechanics	5
Md 5, Mechanics	5	Me 5, Machine Work †6	3
Me 5, Machine Work †9	4.5	Me 8, Machine Design	3
Ps 9, Physics †4	2	Me 9, Materials of Engineering	2
Me 3, Mechanism of Mach	1	Me 10, Fuels	2
Me 24, Kinematical Drawing †2	1	Me 15, Mechanical Lab. †2	1
Elective	2	Elective	2.5
	18.5		18.5

SENIOR YEAR

Ee 10a, Elect. Laboratory †4	2	Me 7, Valve Gears	2
Me 11, Thermodynamics	3	Me 15, Mechanical Eng. Lab †2	1
Me 12, Steam Boiler Design †6	3	Me 16, Steam Engineering	1
Me 15, Mechanical Eng. Lab. †2	1	Me 17, Steam Engine Design †6	3
Electives	8	Electives	10
	17		17

Total hours=19.5+19.5+20+20+18.5+18.5+17+17=150
Electives=2+2.5+8+10=22.5

Students doing sufficiently well with the regular work as scheduled above will be allowed to elect from the following technical subjects: Ce 23, Hydraulics; Ce 22, Foundations; Me 13, Hydraulic Machinery; Me 14, 19, 23, Marine Engineering; Me 20, Heating and Ventilation; Me 21, Seminary and Ee 10b.

At graduation the student receives the degree of Bachelor of Science. Upon the completion of one year's prescribed work in residence, or two years' in absence, including the presentation of a satisfactory thesis and examination at the University, he receives the degree of Master of Science. Three years after graduation, upon the presentation of a satisfactory thesis and proofs of professional work, he may receive the degree of Mechanical Engineer.

The Electrical Engineering Course

This course is intended to provide a thorough preparation in the scientific principles involved in the practice of electrical engineering; to explain nad illustrate the application of these principles to the design, construction, installation, and running of apparatus with which the electrical engineer has to deal, and to give practice and experience in the care and running of the same. In addition to this purely electrical work the student takes up carpentry, forge work, machine work, mechanical drawing, mathematics, physics, mechanics, steam engineering, and other subjects allied to engineering work. The general courses, required or elective, include English language, logic, psychology, history, political economy, education, sociology, and constitutional law.

The equipment for laboratory work in electrical engineering is ample and includes most of the standard forms of instruments and machines.

Requirements for Graduation

FRESHMAN YEAR

Fall Term		*Spring Term*	
Subject	Hours	Subject	Hours
Ch 1, Chemistry	2	Ch 2, Chemistry	3
Ch 3, Lab. Chemistry †2	1	Ch 4, Lab. Chemistry †2	1
Eh 1, Public Speaking	1	Eh 1, Public Speaking	1
Eh 3, English Composition	3	Eh 4, English Composition	3
Md 1, Drawing †4	2	Md 2, Drawing †4	2
*Modern Language	3	*Modern Language	2
Ms 2, Algebra	5	Ms 4, Trigonometry	3
Mt 1, Military †5	2½	Mt 1, Military †5	2½
		Ms 6a, Analytic Geom	2
	19½		19½

* Students beginning a new language must take a five-hour course the first year. This will complete the Modern Language requirement. In this case Eh 3, English Composition, will be taken in the sophomore year.

SOPHOMORE YEAR

Fall Term		*Spring Term*	
Eh 2, Themes	1	Eh 2, Themes	1
Md 3, Descriptive Geom	2	Md 4, Descriptive Geom	2
Me 1, Wood Work † 4	2	Me 2, Forge Work † 4	2
Md 9, Drawing † 4	2	Me 4, Kinematics	3
Modern Language	3	Modern Language	2
Ms 6b, Analytic Geometry	3	Ms 8, Calculus	5
Ms 7, Calculus	2	Ps 2, Physics	3
Ps 1, Physics	5	Ps 5, Lab. Physics † 4	2
	20		20

JUNIOR YEAR

Fall Term		*Spring Term*	
Ee 1a, Elements of Elec. Engineering	2	Ee 1b, Elements of Elec. Engineering	3
Md 5, Mechanics	5	Ee 2b, Lab. Work † 2	1
Me 5, Machine Work † 4	2	Md 6, Mechanics	5
Me 10, Fuels	2	Me 5, Machine Work † 4	2
Ps 11, Electrical Meas. † 6	3	Me 8, Machine Design ‡	3
Elective	4	Elective	4
	18		18

SENIOR YEAR

Fall Term		*Spring Term*	
Ee 3a, Elements of Alt. Current Crcuits	3	Ee 3b, Alt. Current Machinery	2
Ee 4a, Electrical Development	3	Ee 7b, Electrical Engineering	2
Ee 5a, Design of Electrical Machinery † 4	2	Ee 5b, Design of D. C. and A. C. Machinery	1½
Ee 6a, Lab. Work † 4	2	Ee 6b, Lab. Work † 4	2
Me 11, Steam Engineering	3	Ee 8b, Electrical Engineering Practice † 2	1
Elective	5	Me 26, Mechan. Lab. † 3	1½
		Elective	7
	18		17

At graduation the student receives the degree of Bachelor of Science. Upon the completion of one year's prescribed graduate work in residence,

‡ Me 8 may be replaced by Ce 1 and Ce 2, Plain Surveying and Field Work, 2 hours and † 3 hours respectively.

or two years' in absence, including the presentation of a satisfactory thesis and examination at the University, he receives the degree of Master of Science. Three years after graduation, upon the presentation of a satisfactory thesis and proofs of professional work, he may receive the degree of Electrical Engineer.

The Mining Engineering Course

In this department the course of study for the first two years is identical with that in civil engineering, except that, during the second year, class and laboratory work in chemistry takes the place of the courses in mechanical drawing, descriptive geometry and surveying. It is expected that more specific and advanced instruction in this department will be provided at an early date.

The Forestry Course

A complete undergraduate course in forestry is arranged, which may serve as the basis not only of practical work in forestry, but also of a liberal education. A knowledge of the principles of forestry in its different branches is given to the student, and some practice work is done in the forest. For students of agriculture this course offers work in silviculture which will give a training in the management of the farmer's woodlot.

The instruction in this department consists of lectures, recitations, laboratory and field work. The woodland belonging to the University, together with adjacent land covered by a young forest, furnishes a field for the study of many forest problems.

Requirements for Graduation

Freshman Year

Fall Term		*Spring Term*	
Subject	**Hours**	Subject	Hours
Bl 1, General Biology	**2**	Bl 21, General Botany	1
Bl 2, Lab. Biology †2	1	Bl 22, Lab. Botany †4	2
Eh 1, Public Speaking	1	Eh 1, Public Speaking	1
Eh 3, English Composition	3	Eh 4, English Composition	3
Md 1, Drawing †4	2	Md 2, Mechanical Drawing †4	2
Modern Language	3	**Ms 4, Trigonometry**	
Ms 2, Algebra	5	Ms 6a, Anal. Geometry	5
Mt 1, Military †5	2½	Modern Language	2
		Mt 1, Military †5	2½
	19½		18½

SOPHOMORE YEAR

Fall Term		*Spring Term*	
Bl 23, General Botany † 4	2	Bl 27, Plant Physiology	1
Ch 1, General Chemistry	2	Bl 28, Lab. Physiology † 2	1
Ch 3, Lab. Chemistry † 2	1	Ch 1, Plane Surveying	2
Eh 2, English Comp	1	Ch 2, Plane Surveying Field Work † 6	3
Bl 38, Forest Botany	2	Ch 2, Chemistry	3
Bl 39, Lab. Forest Botany † 4	2	Ch 4, Lab. Chemistry † 2	1
Modern Language	3	Eh 2, English Comp	1
Ps 12, Physics	5	Bl 40, Forest Botany	2
		Bl 41, Lab. Forest Botany	2
		Modern Language	3
	18		19

JUNIOR YEAR

Fall Term		*Spring Term*	
Fy 6, Silviculture	2	Fy 7, Silviculture	2
Fy 8, Silviculture, Field Work † 4	2	Fy 9, Silviculture, Field Work † 4	2
Ag 1, Soils	2	Bl 7, Zoölogy	2
Ag 2, Soils † 2	1	Bl 8, Laboratory Zoölogy † 6	3
Bl 5, Zoölogy	2	Bl 9, Physiology	2
Bl 6, Laboratory Zoölogy † 6	3	Bl 11, Entomology † 4	2
Bl 25, Plant Histology	1	Electives	5
Bl 26, Lab. Plant Histology † 4	2		
Electives	5		
	20		18

SENIOR YEAR

Fall Term		*Spring Term*	
Fy 10, Forest Measurements	1½	Fy 4, Forest Measurements	1
Fy 11, Forest Measurements, Field Work † 4	2	Fy 5, Forest Measurements, Laboratory † 2	1
Fy 12, Lumbering	3½	Fy 13, Forest Management	1
Cv 2, Political Economy	5	Fy 14, Thesis † 10	5
Ce 5, Highway Engineering	1	Ch 13, Mineralogy	3
Electives	6	Electives	7
	19		18

At graduation the student receives the degree of Bachelor of Science. Upon the completion of one year's prescribed graduate work in residence, or two years' in absence, including the presentation of a satisfactory thesis and examination at the University, he receive the degree of Master of Science.

COLLEGE OF PHARMACY

FACULTY OF INSTRUCTION

GEORGE EMORY FELLOWS, PH. D., L. H. D., LL. D.
President of the University

ALFRED BELLAMY AUBERT, M. S. *Professor of Chemistry*

JAMES NORRIS HART, C. E., M. S.
Professor of Mathematics and Astronomy

FREMONT LINCOLN RUSSELL, B. S., V. S. *Professor of Biology*

HORACE MELVYN ESTABROOKE, M. A. *Professor of English*

JAMES STACY STEVENS, M. S. *Professor of Physics*

GILMAN ARTHUR DREW, PH. D. *Professor of Biology*

WILBUR FISK JACKMAN, B. S. PH. C. *Professor of Pharmacy*

RALPH KNEELAND JONES, B. S. *Librarian*

JACOB BERNARD SEGALL, PH. D.
Professor of Romance Languages

JOSEPH WILLIAM CARR, PH. D.
Professor of Germanic Languages

WALTER STEVENS BROWN
Professor of Military Science and Tactics

MAX CARL GUENTHER LENTZ
Assistant Professor of Germanic Languages

GEORGE RUFUS WHEELER, M. A.
Acting Assistant Professor of English

HENRY MARTIN SHUTE, M. A. *Instructor in Romance Languages*

MARSHALL BAXTER CUMMINGS, M. S. *Instructor in Biology*

HARLEY RICHARD WILLARD, M. A. *Instructor in Mathematics*

RAYMOND KURTZ MORLEY, M. A. *Instructor in Mathematics*

MATTHEW HUME BEDFORD, PH. D. *Instructor in Chemistry*

WALTER EVERETT PRINCE, M. A. *Instructor in English*

WILLIAM ROSS HAM, B. A. *Instructor in Physics*

PERCY LORING REYNOLDS, M. D.
Physical Director and University Physician

RALPH LOWE SEABURY, B. S.
Instructor in Biological and Agricultural Chemistry

ELMER EARL MOOTS, B. C. E. *Instructor in Mathematics*

WINDSOR PRATT DAGGETT, PH. B.
Instructor in Public Speaking

FLORENCE BALENTINE, B. A. *Tutor in Biology*

HENRY WALTER BEARCE, B. S. *Tutor in Physics*

GENERAL INFORMATION

The College of Pharmacy comprises:
The Pharmacy Course
The Short Course in Pharmacy

The Pharmacy Course

This course is offered in response to a demand for a thorough training, both general and technical, for those who are to become pharmacists. It aims to combine a broad general culture and a thorough preparation along its special lines, with the design of affording both the intellectual development necessary for the well rounded professional or business man, and the necessary technical training. To this end, it includes the same instruction in modern languages, civics, and the sciences, as is offered in other college courses. Thirty credits are required for graduation.

Those who intend to fit themselves for pharmaceutical work are urged to consider carefully the superior advantages of this course. The growing importance of the biological, sanitary, and medical sciences, and the pharmacist's relation to them, makes it increasingly necessary to his success that he be not only a well trained man in the technical branches but an educated man in the broadest sense.

Instruction in pharmaceutical studies is given by means of lectures, recitations, and tests, supplemented by work in the laboratories of chemistry and pharmacy. It embraces qualitative, quantitative, and volumetric analysis, toxicology, bacteriology, prescriptions, the preparation of pharmaceutical compounds, and original investigations.

The library contains valuable reference literature in chemistry and pharmacy, and the best chemical and pharmaceutical journals.

Requirements for Graduation

FRESHMAN YEAR

Fall Term		*Spring Term*	
Subject	Hours	Subject	Hours
Rm 3a, French *	3	Rm 3b, French	2
Eh 1, Pub. Speaking	1	Eh 1, Pub. Speaking	1
Eh 3, Eng. Composition	3	Eh 4, Eng. Composition	3
Ch 1, Gen. Chemistry	2	Ch 2, General Chemistry	3

* Students beginning German must take five hours per week for a year, which will complete the required work in modern language.

Ch 3, Lab. Chem. †2	1	Ch 4, Lab. Chem. †2	1
Ms 2, Algebra	5	Ms 1, Solid Geom.	5
Military †5	2½	Ms 4, Trig. (10 w.)	
		Military †5	2½
	17½		17½

SOPHOMORE YEAR

Fall Term		*Spring Term*	
Rm 4a, French	3	Rm 4b, French	3
Ps 12, Gen. Physics	5	Ps 5, Lab. Physics †4	2
Eh 2, Eng. Composition	1	Eh 2, Eng. Composition	1
Ch 5, Inorg. Chemistry	2	Ch 6, Inorg. Chemistry	3
Ch 14, Qual. Anal. †8	4	Ch 15, Qual. Anal. †8	4
Bl 1, Gen. Biol.	2	Bl 9, Physiology	2
Bl 2, Lab. Biol. †2	1	Bl 21, Gen. Botany	1
		Bl 22, Lab. Botany †4	2
		Elective	2
	18		20

JUNIOR YEAR

Fall Term		*Spring Term*	
Ch 7, Org. Chemistry	3	Ch 8, Org. Chemistry	2
Ch 16, Quant. Anal. †8	4	Ch 19, Vol. Anal. †12	6
Ch 30, Biol. Chem.	5	Ch 21, Tox. etc. †2	1
Bl 25, Plant Hist.	1	Ch 31, Chem. Eq.	2
Bl 26, Lab. Plant Hist. †4	2	Bl 17, Bacteriol. (9 w.) †10	2½
Pm 5, Inorg. Pharmacog.	2	Pm 6, Org. Pharmacog.	4
Elective	3	Elective	2
	20		19½

SENIOR YEAR

Fall Term		*Spring Term*	
Pm 2, Pharmacy	5	Pm 4, Pharmacopeia	5
Pm 3, Lab. Pharm. †12	6	Pm 9, Pharm. Reading †5	2½
Pm 7, Mater. Med.	3	Pm 10, Lab. Pharm. †10	5
Elective	4	Pm 11, Prescriptions	3
		Elective	4
	18		19½

From courses in History, Philosophy and Civics a total of at least five hours must be chosen.

The number of hours required and elected need not exceed 150, or 30 credits.

At graduation the student receives the degree of Bachelor of Science. Upon the completion of one year's prescribed work in residence, or two years' in absence, including the presentation of a satisfactory thesis, and examination at the University, he receives the degree of Master of Science.

The Short Course in Pharmacy

This course, of two years, is designed for those who, for lack of time or for other reasons, are unable to take the course of four years. The more general educational studies of the full course are omitted, but as broad a range of subjects is offered as can be undertaken without sacrifice of thoroughness in the technical work. The course corresponds, in general, to the usual full course of pharmacy colleges. The work required of the student will occupy his whole time during the college year of nine months, and will usually exclude work in drug stores during term time. The brevity of this course does not warrant extending to other than advanced students the privilege of electives.

Requirements for Graduation

FRESHMAN YEAR

Fall Term		*Spring Term*	
Subject	Hours	Subject	Hours
Ch 1, Gen. Chemistry	2	Ch 2, Gen. Chemistry	3
Ch 14, Qual. Anal. † 16	8	Ch 15, Qual. Anal. (9 w.) † 10	5
Pm 1, Pharm. Chem	5	Ch 19, Vol. Anal. (9 w.) † 10	
Pm 5, Inorg. Pharmacog	2	Ch 31, Chem. Eq.	2
Military † 5	2½	Bl 21, Gen. Botany	1
		Bl 22, Lab. Botany † 4	2
		Pm 6, Org. Pharmacog	4
		Military † 5	2½
	19½		19½

SOPHOMORE YEAR

Fall Term		*Spring Term*	
Ch 7, Org. Chem	3	Ch 8, Org. Chem	2
Pm 2, Pharmacy	5	Ch 21, Tox., etc., † 2	1
Pm 3, Lab. Pharmacy † 12	6	Pm 4, Pharmacy	5
Pm 7, Mat. Medica	3	Pm 9, Pharm. Read. † 3	1½
Bl 25, Plant Hist	1	Pm 10, Lab. Pharm. † 10	5
Bl 26, Lab. Plant Hist. † 4	2	Pm 11, Prescriptions	3
		Bl 17, Bacteriol. (9 w.)	2½
	20		20

Students who complete this course in a satisfactory manner receive the degree of Pharmaceutical Chemist.

COLLEGE OF LAW

FACULTY OF INSTRUCTION

GEORGE EMORY FELLOWS, PH. D., L. H. D., LL. D.
President of the University

WILLIAM EMANUEL WALZ, M. A., LL. B.
Dean, and Professor of Law

ALLEN ELLINGTON ROGERS, M. A.
Professor of Constitutional Law

EDGAR MYRICK SIMPSON, B. A.
Assistant Professor of Real Property and Corporations

BERTRAM LEIGH FLETCHER, LL. B.
Instructor in Negotiable Paper

GEORGE HENRY WORSTER, LL. M. *Instructor in Sales and Wills*

BARTLETT BROOKS, B. A., LL. B. *Instructor in Contracts*

FOREST JOHN MARTIN, LL. B.
Resident Lecturer on Common Law Pleading and Maine Practice

HUGO CLARK, C. E.
Resident Lecturer on Equity Pleading and Practice

CHARLES HAMLIN, M. A.
Lecturer on Bankruptcy and Federal Procedure

LUCILIUS ALONSO EMERY, LL. D.
Lecturer on Roman Law and Probate Law

ANDREW PETERS WISWELL, LL. D. *Lecturer on Evidence*

LOUIS CARVER SOUTHARD, LL. D.
Lecturer on Medico-Legal Relations

RALPH KNEELAND JONES, B. S. *Librarian*

GENERAL INFORMATION

The College of Law was opened to students in 1898. It occupies rooms in the Exchange Building, at the corner of State and Exchange streets, Bangor. In this city are held annually one term of the U. S. District Court, five terms of the Maine Supreme Judicial Court, one term of the Law Court, and daily sessions of the Municipal Court. The law library contains about 3,000 volumes, including the reports of the Supreme Court of the United States, Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Ohio, and the Court of Appeals of New York, the New York Common Law and Chancery Reports, the American

Decisions, American Reports, American State Reports, the Complete Reporter System, the Lawyers' Reports Annotated, all the Law Encyclopædias, and a considerable number of text-books.

Admission

Graduates of any college or satisfactory preparatory school are admitted to the college as candidates for the degree of Bachelor of Laws, without examination. Other applicants must give satisfactory evidence of the necessary educational qualifications for the pursuit of the required course of study. These will be fixed in each case according to the rules of the Association of American Law Schools, of which association this school is a member. Attention is called to a change made in these rules by the Association of American Law Schools at its meeting at Narragansett Pier, R. I., in August, 1905. The following resolution was then passed:

"Section one of Article VI of the Articles of Association shall be amended so that it will read as follows:

"I. It shall require of all candidates for its degree at the time of their admission to the school, the completion of a four years' high school course, or such a course of preparation as would be accepted for admission to the state university, or to the principal colleges and universities in the state where the law school is located; provided, that this requirement shall not take effect until September, 1907."

Special students, not candidates for a degree, will be admitted without examination, and may pursue any studies for which they are prepared.

Students from other schools, which are members of the Association of American Law Schools, are admitted to classes in this institution corresponding to classes in the schools from which they come, upon the production of a certificate showing the satisfactory completion of the prior work in such schools.

Students from law offices otherwise qualified are admitted to advanced standing upon passing a satisfactory examination upon the earlier subjects of the course.

Members of the bar of any state may be admitted to the senior class, without examination, as candidates for the degree of Bachelor of Laws, while graduate students may take one of the two courses leading to the degree of Master of Laws.

Methods of Instruction

The college is not committed exclusively to any one method of instruction, and recognizes the great value of lectures by able men, and the profit to be found in the use of standard text-books; but the greatest

stress is placed upon the study of selected cases, and most of the work is carried on in this way. It is believed that through the case the student can best come at the controlling principles of the law, and that in no other way can he get so vital a comprehension of them. "Through the case to the principle," may, perhaps, adequately indicate the standpoint of the school in the matter of method.

Particular stress is placed upon the Practice Court, which is held once a week as a part of the work of the college, and in which every student is required to appear regularly. The questions of law are in all instances made to arise from the pleadings prepared by the students, and briefs, summarizing the points involved and the authorities cited, are submitted to the presiding judge.

The aim and spirit of the college are eminently practical, the purpose being to equip men for the everyday duties of the practicing attorney.

Course of Study

The course of study covers three years, in accordance with the requirements for admission to the bar in the State of Maine. The college year consists of thirty-two weeks, and is divided into the fall, winter, and spring terms, of eleven, ten, and eleven weeks respectively.

Expenses

The annual tuition fee is $70, $23.33 at the beginning of each term, payable in advance. Of this sum $10 is a library charge. The graduation fee is $10. There are no other charges.

Board and furnished rooms, with light and heat, may be obtained in the most convenient locations, at a price ranging from $3 to $7 a week. It is believed that expenses in this department, as well as in other departments of the University, are lower than in any other New England college.

Degrees

At the completion of the three years' course, the degree of Bachelor of Laws is conferred. Upon the completion of one year's prescribed work in residence, or two years' in absence, including the presentation of a satisfactory thesis and examination at the University, the degree of Master of Laws is granted.

Attorneys-at-law who have been actively engaged in practice at the bar for not less than five years, and attorneys who hold a college degree and have practised for not less than two years, may, on presentation of a recommendation from one of the justices of the highest court of their State, be also admitted to the course leading to the master's degree.

COURSES OF INSTRUCTION

Lw 1. Agency.—Text-book, Huffcut's Cases on Agency. *Three hours a week.* Spring term. Mr. Worster.

Lw 2. Bankruptcy.—Lectures. *Two hours a week.* Winter term. General Hamlin.

Lw 3. Carriers.—Text-book, McClain's Cases on Carriers. *One hour a week.* Fall term. Professor Simpson.

Lw 4. Carriers.—A continuation of course 3. *Two hours a week.* Winter term. Professor Simpson.

Lw 5. Common Law Pleading.—Lectures. *Two hours a week.* Winter term. Mr. Martin.

Lw 6. Common Law Pleading.—A continuation of course 5. *One hour a week.* Spring term. Mr. Martin.

Lw 7. Conflict of Laws.—Dwyer's Cases. *Three hours a week.* Spring term. Professor Walz.

Lw 8. Constitutional Law.—Boyd's Cases. *Two hours a week.* Winter term. Mr. ————.

Lw 9. Contracts.—Keener's Cases on Contracts. *Four hours a week.* Fall term. Mr. Brooks.

Lw 10. Contracts. A continuation of course 9. *Three hours a week.* Winter term. Mr. Brooks.

Lw 11. Contracts.—A continuation of course 10. *Two hours a week.* Spring term. Mr. Brooks.

Lw 12. Criminal Law.—Beale's Cases on Criminal Law. *Two hours a week.* Winter term. Professor Simpson.

Lw 13. Criminal Law.—A continuation of course 12. *Three hours a week.* Spring term. Professor Simpson.

Lw 14. Damages.—Beale's Cases on Damages. *Three hours a week.* Winter term. Mr. Worster.

Lw 15. Domestic Relations.—Smith's Cases on Persons. *Three hours a week.* Fall term. Professor Simpson.

Lw 16. Equity Jurisprudence.—Bispham on Equity Jurisprudence and Shepard's Cases on Equity. *Four hours a week.* Fall term. Professor Walz.

Lw 17. Equity Jurisprudence.—A continuation of course 16. *Three hours a week.* Winter term. Professor Walz.

Lw 18. Equity Pleading.—Lectures. *Two hours a week.* Spring term. Mr. Clark.

Lw 19. Evidence.—Thayer's Cases. *Four hours a week.* Fall term. Professor Simpson.

Lw 20. Evidence.—A continuation of course 19. *Three hours a week.* Winter term. Professor Simpson.

Lw 21. Evidence.—Lectures. *Number of hours not fixed.* Winter term. Mr. Chief Justice Wiswell.

Lw 22. Executors and Administrators.—Lectures. *One hour a week.* Spring term. Professor Simpson.

Lw 23. Federal Courts.—Lectures. *One hour a week.* Spring term. Professor Walz.

Lw 24. General Review.—Gardner's Review. *One hour a week.* Fall term. Professor Walz.

Lw 25. General Review.—Gardner's Review. *One hour a week.* Winter term. Professor Walz.

Lw 26. General Review.—Gardner's Review. *One hour a week.* Spring term. Professor Walz.

Lw 27. History of Law.—Lectures. *One hour a week.* Fall term. Mr. ————.

Lw 28. Insurance.—Woodruff's Cases. *Three hours a week.* Spring term. Mr. Worster.

Lw 29. International Law.—Lectures. *One hour a week.* Fall term. Mr. ————.

Lw 30. Maine Practice.—Lectures. *One hour a week.* Spring term. Mr. Martin.

Lw 31. Medico-Legal Relations.—Lectures. *About six hours.* Spring term. Mr. Southard.

Lw 32. Municipal Corporations.—Smith's Cases. *Three hours a week.* Winter term. Professor Walz.

Lw 33. Negotiable Paper.—Huffcut's Cases. *Two hours a week.* Winter term. Mr. Fletcher.

Lw 34. Negotiable Paper.—A continuation of course 33. *Three hours a week.* Spring term. Mr. Fletcher.

Lw 35. Partnership.—Ames's Cases. *Four hours a week.* Spring term. Professor Walz.

Lw 36. Private Corporations.—Smith's Cases. *Four hours a week.* Fall term. Professor Simpson.

Lw 37. Private Corporations.—A continuation of course 36. *Three hours a week.* Winter term. Professor Simpson.

Lw 38. Probate Law and Practice.—Lectures. *About ten hours.* Spring term. Mr. Justice Emery.

Lw 39. Real Property.—Tiedeman on Real Property. *Four hours a week.* Fall term. Professor Simpson.

Lw 40. Real Property.—A continuation of course 39. *Three hours a week.* Winter term. Professor Simpson.

Lw 41. Real Property.—Finch's Cases on the Law of Property in Land. *Four hours a week.* Spring term. Professor Simpson.

Lw 42. Roman Law.—Lectures. *About ten hours.* Spring term. Mr. Justice Emery.

Lw 43. Sales.—Burdick's Cases. *Two hours a week.* Fall term. Mr. Worster.

Lw 44. Sales.—A continuation of course 43. *Two hours a week.* Winter term. Mr. Worster.

Lw 45. Suretyship.—Ames's Cases. *Two hours a week.* Fall term. Mr. Worster.

Lw 46. Suretyship.—A continuation of course 45. *Two hours a week.* Winter term. Mr. Worster.

Lw 47. Torts.—Ames and Smith's Cases. *Four hours a week.* Fall term. Professor Walz.

Lw 48. Torts.—A continuation of course 47. *Three hours a week.* Winter term. Professor Walz.

Lw 49. Torts.—A continuation of course 48. *Two hours a week.* Spring term. Professor Walz.

Lw 50. What to do in Court.—Lectures. *About ten hours.* Spring term. Mr. Justice Emery.

Lw 51. Wills.—Chaplin's Cases. *Three hours a week.* Spring term. Mr. Worster.

THE MAINE AGRICULTURAL EXPERIMENT STATION

FACULTY OF INVESTIGATION

GEORGE EMORY FELLOWS, Ph. D., L. H. D., LL. D. — *President of the University*
CHARLES DAYTON WOODS, Sc. D. — *Director*
JAMES MONROE BARTLETT, M. S. — *Chemistry*
LUCIUS HERBERT MERRILL, B. S. — *Chemistry*
FREMONT LINCOLN RUSSELL, B. S., V. S. — *Veterinary Science*
WELTON MARKS MUNSON, Ph. D. — *Pomology*
GILBERT MOTTIER GOWELL, M. S. — *Poultry Investigations*
EDITH MARION PATCH, B. S. — *Entomology*
HERMAN HERBERT HANSON, M. S. — *Chemistry*
WARNER JACKSON MORSE, M. S. — *Vegetable Pathology*
ARTHUR CRAIG WHITTIER, B. S. — *Chemistry*
JOANNA CARVER COLCORD, B. S. — *Chemistry*
ROYDEN LINDSAY HAMMOND — *Seed Analysis and Photography*
HENRY ATLEIGH MILLETT — *Meteorology*
ANNIE MARIE SNOW — *Clerk and Stenographer to the Director*
BLANCHE FOLSOM POOLER — *Stenographer*
WALTER ANDERSON — *Poultry Investigations*

ESTABLISHMENT OF THE STATION

The Maine Fertilizer Control and Agricultural Experiment Station, established by Act of the Legislature approved March 3, 1885, began its work in April of that year in quarters furnished by the College. After this Station had existed for two years, Congress passed what is known as the Hatch Act, establishing agricultural experiment stations in every state. This grant was accepted by the Maine Legislature by an Act approved March 16, 1887, which established the Maine Agricultural Experiment Station as a department of the University. The reorganization was effected in June, 1887, but work was not begun until February 16, 1888. In 1906 Congress passed the Adams Act for the further endowment of the stations established under the Hatch Act.

GOVERNMENT OF THE STATION

By authority of the Trustees the affairs of the Station are considered by the Station Council, (see page 6) composed of the President of the University, three members of the Board of Trustees, the Director of the Station, the heads of the various departments of the Station, the Commissioner of Agriculture, and one member each from the State Pomological Society, the State Grange, and the State Dairyman's Association. The recommendations of the Council are referred to the Trustees for final action. The Director is the executive officer of the Station, and the other members of the staff carry out the lines of research that naturally come under their departments.

INCOME

The income of the Station for 1906-7 is about $30,000; $15,000 of which comes from the Hatch fund, $7,000 from the Adams fund, $2,000 from State appropriations for food, seed, and feeding stuff inspections, about $4,000 from fertilizer inspection fees, $1,000 from the United States Department of Agriculture for co-operative experiments with poultry, and about $1,000 from miscellaneous sources.

THE OBJECT

The purpose of the experiment stations is defined in the Act of Congress establishing them as follows:

"It shall be the object and duty of said experiment stations to conduct original researches or verify experiments on the physiology of plants and animals; the diseases to which they are severally subject, with the remedies for the same; the chemical composition of useful plants at their different stages of growth; the comparative advantages of rotative cropping as pursued under a varying series of crops; the capacity of new plants or trees for acclimation; the analysis of soils and water; the chemical composition of manures, natural and artificial, with experiments designed to test their comparative effects on crops of different kinds; the adaptation and value of grasses and forage plants; the composition and digestibility of the different kinds of food for domestic animals; the scientific and economic questions involved in the production of butter and cheese; and such other researches or experiments bearing directly on the agricultural industry of the United States as may in each case be deemed advisable, having due regard to the varying conditions and needs of the respective states or territories."

Any resident of Maine concerned in agriculture has the right to apply to the Station for any assistance that comes within its province.

EQUIPMENT

Most of the Station offices and laboratories are in Holmes Hall, described on page 21. The Station also occupies space in the horticultural building and barns of the University and enjoys all needed facilities of the College of Agriculture. The Station is well equipped in laboratories and apparatus, particularly in the lines of chemical, entomological, horticultural, pomological, vegetable pathological, and poultry investigations. Its poultry plant is probably the most complete of that of any experiment station in the country. It has extensive collections illustrating the botany and entomology of the State. It has a library of about 3,000 volumes, chiefly agricultural and biological journals, and publications of the various experiment stations.

INVESTIGATIONS

The Station continues to restrict its work to a few important lines, believing that it is better for the agriculture of the State to study thoroughly a few problems than to spread over the whole field of agricultural science. It has continued to improve its facilities and segregate its work in such a way as to make it an effective agency for research in agriculture. Prominent among the lines of investigation are studies upon the food of man and animals, the diseases of plants and animals, orchard and field experiments, poultry investigations, and entomological research. Some of these are in co-operation with bureaus of the United States Department of Agriculture. Field experiments with crops and orchards are carried on, in the parts of the State where the crop in question is a leading industry, on private land in co-operation with the owners.

INSPECTIONS

The inspection of food, the inspection of fertilizers, the inspection of concentrated commercial feeding stuffs, the inspection of agricultural seeds, and the testing of the graduated glassware used in creameries, are entrusted to the Station through its director, who is responsible for the execution of the public laws relating to these matters. The cost of the fertilizer inspection is borne by a brand tax, that of the feeding stuff, food and seed inspections by a State appropriation, and that of chemical glassware by a charge for calibration.

DISSEMINATION OF INFORMATION

The Station publishes the account of its work in bulletin form. The bulletins for a year form a volume of about 225 pages and make up the annual report. Bulletins which contain matter of immediate value to practical agriculture are sent free of cost to the entire mailing list of the Station. On request, the name of any resident of Maine will be placed on the mailing list.

Newspaper bulletins on special topics are published from time to time as occasion demands. These are very generally printed by the press of the State and the agricultural papers of the country.

The Station has a large correspondence, chiefly with practical farmers in the State. Careful attention is given to all inquiries and it is believed that in this way the Station is increasingly helpful to the farmer.

COMMENCEMENT

The Commencement exercisces of 1906 were as follows:

Sunday, June 10: Baccalaureate Address, by Reverend Frank Channing Haddock, D. D.

Monday, June 11: University Convocation, including reports of departments and student enterprises, and the awarding of prizes; Class Day Exercises; President's Reception.

Tuesday, June 12: Phi Kappa Phi Initiation; Meeting of the Alumni Association; Receptions by the various fraternities; Alumni Luncheon; Alumnae Luncheon; Business Meeting of the Alumni Association.

Wednesday, June 13: Commencement Exercises; Commencement Dinner; Commencement Concert.

DEGREES CONFERRED

(The major subjects are stated in parenthesis.)

College of Agriculture

Roy Sawtelle Bacon, B. S. ..... Sidney
Frederic Hall Harlow, B. S. ..... Gorham
Thomas Harold Reynolds, B. S. ..... Eastport
Alton Willard Richardson, B. S. ..... Bethel
Edward Arthur Stanford, B. S. ..... Lovell Center

College of Arts and Sciences

Henry Walter Bearce, B. S. (Physics) ..... Hebron
Richard Arthur Bolt, B. A. (Civics) ..... St. John, N. B.
John Meikle Brockie, B. A. (Philosophy) ..... Old Town
Everett Dana Brown, B. A. (History) ..... South Paris
Joanna Carver Colcord, B. S. (Chemistry) ..... Searsport
Guerric Gaspard DeColigny, B. S. (Chemistry) ..... Springfield, Mass.
Dayton James Edwards, B. S. (Biology) ..... Oxford
Joseph Galland, B. S. (Modern Languages) ..... Biddeford
Carolyn Adelle Hodgdon, B. A. (Greek) ..... Hampden Corner
Gertrude May Jones, B. S. (Biology) ..... Corinna
Merton Rooks Lovett, B. S. (History) ..... Beverly, Mass.
Estelle Perry, B. S. (History) ..... Penobscot
Frederick Johnson Simmons, B. A. (Civics) ..... Morrill
Frederick Dean Southard, B. S. (English) ..... Dorchester, Mass.
Mary Frances Webber, B. A. (Latin) ..... Bangor
Albert Ames Whitmore, B. S. (History) ..... Fryeburg

College of Pharmacy

Harry Leon Gordon, Ph. C.....Augusta
Leon Herbert Marr, Ph. C.....Farmington

College of Technology

Herbert Lester Abbott, B. S. in Civil Engineering.....Bucksport
Frank Arthur Banks, B. S. in Civil Engineering.....Biddeford
Winfield Dexter Bearce, B. S. in Electrical Engineering.....Auburn
Arthur Guy Bennett, B. S. in Electrical Engineering.....Paris
Walter Horace Burke, B. S. in Electrical Engineering.....Kennebunk
Alfred Jared Butterworth, B. S. in Civil Engineering..Southbridge, Mass.
Charles William Campbell, B. S. in Civil Engineering.....Ellsworth
Gotthard Wilhelm Carlson, B. S. in Electrical Engineering.....Bethel
Sidney Cassey, B. S. in Mechanical Engineering.....Lynn, Mass.
Howard Lincoln Churchill, B. S. in Forestry.....Buckfield
Lincoln Crowell, B. S. in Forestry.....Dorchester, Mass.
Charles Ellsworth Currier, B. S. in Electrical Engineering.....Brewer
William Ray Dolbier, B. S. in Civil Engineering.....Salem
Hallet Carroll Elliott, B. S. in Civil Engineering.....Patten
James William Elms, B. S. in Chemistry.....Foxcroft
Harry Alvah Emery, B. S. in Civil Engineering.....North Anson
Clinton Fairfield Forbes, B. S. in Electrical Engineering.....Buckfield
Walter Oscar Frost, B. S. in Forestry.....Rockland
Philip Holden Glover, B. S. in Civil Engineering.....Harrington
Claude Albert Gray, B. S. in Mechanical Engineering.....Bridgton
Wellington Prescott Hews, B. S. in Civil Engineering.....Ashland
George Herbert Hill, B. S. in Civil Engineering.....Saco
Lester Boynton Howard, B. S. in Electrical Engineering.....Dover
Harold Shepherd Hoxie, B. S. in Civil Engineering....Fairfield Center
Harvey Hamlin Hoxie, B. S. in Electrical Engineering.....Waterville
Caleb Hartwell Johnson, B. S. in Mechanical Engineering..Nahant, Mass.
Harold Lewis Karl, B. S. in Electrical Engineering.....Rockland
Raymond Brown Kittredge, B. S. in Civil Engineering...Beverly, Mass.
Ralph Edwin Lord, B. S. in Civil Engineering.....Bangor
Charles Libby Lang, B. S. in Electrical Engineering.....Harrison
William Lawrence McDermott, B. S. in Mechanical Engineering, Biddeford
Leroy Cleveland Nichols, B. S. in Electrical Engineering.....Saco
Robert Franklin Olds, B. S. in Civil Engineering.....Lewiston
George Stuart Owen, B. S. in Civil Engineering.....Portland

James Lonsdale Paige, B. S. in Mechanical Engineering, Southbridge, Mass.
Roy Hiram Porter, B. S. in Mechanical Engineering.....South Paris
Charles Edward Prince, B. S. in Electrical Engineering.....Kittery
Frank Radford Reed, Jr., B. S. in Civil Engineering....Rumford Falls
Earle Revere Richards, B. S. in Civil Engineering.....New Gloucester
David Nathan Rogers, B. S. in Forestry.....Patten
Harold Dockum Ross, B. S. in Electrical Engineering.....Skowhegan
Edgar John Sawyer, B. S. in Civil Engineering.....Milbridge
Raphael Simmons Sherman, B. S. in Electrical Engineering....Rockland
John Percy Simmons, B. S. in Civil Engineering.....Belfast
Ralph Seldon Smith, B. S. in Civil Engineering.....Old Town
Arthur Leonard Sparrow, B. S. in Mechanical Engineering, South Orleans, Mass.
Fred Oramel Stevens, B. S. in Civil Engineering.....Milan, N. H.
Frank Carroll Stewart, B. S. in Electrical Engineering.....Farmington
George Roger Tarbox, B. S. in Mechanical Engineering.....Machias
James Gordon Wallace, B. S. in Civil Engineering.....Portland
Arthur Pettingill Weymouth, B. S. in Electrical Engineering....Dexter

College of Law

Gerry Lynn Brooks, LL. B.....Upton
Winfield Scott Brown, LL. B. (B. A., Bates College, 1895).....Dexter
Elmer John Burnham, LL. B.....Kittery
James Adams Colby, LL. B.....Lynn, Mass.
Charles Patrick Conners, LL. B. (B. A., Bowdoin College, 1903)..Bangor
Carl Cotton, LL. B. (B. A., Colby Collge, 1900).....Bangor
George Albert Cowan, LL. B.....Hampden
James Albert Donnelly, LL. B.....Houlton
Frederick Eugene Doyle, LL. B. (B. A., Holy Cross College, 1901), Ellsworth
Oscar Hall Dunbar, LL. B.....Jonesport
Lewis Edwin Fox, LL. B.....Lovell
Moses Harry Harris, LL. B.....Auburn
Percy Albert Hasty, LL. B.....Bangor
Joseph Alphonse Laliberte, LL. B.....Fort Kent
Eben Frank Littlefield, LL. B.....Brooks
George William Pike, LL. B.....Lisbon, N. H.
William Richard Roix, LL. B.....Bucksport
Lucius Black Swett, LL. B.....West Hollis

ADVANCED DEGREES

Master of Arts

Helen Veazie Gerrity, B. A. (Mount Holyoke College, 1905) (Mathematics) ..... Bangor
Horace Bray Haskell, B. Ph. (Taylor University, 1900) (English), Orono
William Linscot Waldron, B. A. (Colby College, 1897) (French), Waterville

Master of Science

Herman Herbert Hanson, B. S. (Pennsylvania State College, 1902), (Chemistry) ..... Orono
Fred Carlton Mitchell, B. S. (1900), (Physics) ..... Camden

Electrical Engineer

Enoch Joseph Bartlett, B. S. in Electrical Engineering (1902), Hartford, Conn.
Howard Ashburn Smith, B. S. in Electrical Engineering (1903), Lynn, Mass.

Master of Laws

Ansel Harrison Bridges, LL. B. (1904) ..... Old Town
Clarence Bertram Hight, LL. B. (1904) ..... Dexter
George Henry Worster, LL. B. (1905) ..... Bangor

PRIZES AWARDED

The various prizes were awarded last year as follows:

The Kidder Scholarship, to Clarence McLellan Weston, Madison.

The Western Alumni Association Scholarship, to Bertrand French Brann, Bangor.

The New York Alumni Association Scholarship, to Bertrand French Brann, Bangor.

The Boston Alumni Association Scholarship, to Marion Balentine, Orono.

The Junior Exhibition Prize, to Lucius Dwelley Barrows, Foxcroft.

The Sophomore Declamation Prize, to Raymond Fellows, Bucksport.

The Franklin Danforth Prize, to Edward Arthur Stanford, Lovell Center.

The Walter Balentine Prize, to Joseph Farrington Merrill, Auburn, and Willis Flye Washburn, China.

The Kennebec County Prize, to Harold Lewis Karl, Rockland, and Raphael Simmons Sherman, Rockland.

The Pittsburg Alumni Association Scholarship, to Howard Carlton Stetson, Auburn.

APPOINTMENTS

Speakers at the Junior Exhibition, June, 1906

Marion Balentine, Orono; Lucius Dwelley Barrows, Foxcroft; Charles Eugene Davis, Bridgton; Elmer Guy Hooper, West Lynn, Mass.; Arthur Russell Lord, Ipswich, Mass.; Howard Grenville Philbrook, Shelburne, N. H.; Howard Carlton Stetson, Auburn.

Speakers at the Sophomore Prize Declamation Contest, December, 1905

Chester Arthur Brownell, Newport, R. I.; Mildred Chase, Bluehill; Raymond Fellows, Bucksport; Henry LeRoy Miner, Haverhill, Mass.; Perley Fiske Skofield, Houlton; Oscar Franklin Smith, Calais; Raymond Judson Smith, Skowhegan; Earle Nelson Vickery, Pittsfield.

Members of the Phi Kappa Phi

Herbert Lester Abbott, Bucksport; Frank Arthur Banks, Biddeford; Gotthard Wilhelm Carlson, Bethel; Joanna Carver Colcord, Searsport; Philip Holden Glover, Harrington; George Herbert Hill, Saco; Moses Harry Harris, Auburn; Carolyn Adelle Hodgdon, Hampden Corner; Raymond Brown Kittredge, Beverly, Mass.; Leroy Cleveland Nichols, Saco; Earle Revere Richards, New Gloucester; Lucius Black Swett, West Hollis.

Seniors Receiving General Honors

Herbert Lester Abbott, Bucksport; Gotthard Wilhelm Carlson, Bethel; Joanna Carver Colcord, Searsport; George Herbert Hill, Saco; Carolyn Adelle Hodgdon, Hampden Corner; Raymond Brown Kittredge, Beverly, Mass.; Leroy Cleveland Nichcols, Saco.

From the College of Law

Lucius Black Swett, West Hollis.

Seniors Receiving Special Honors

Joanna Carver Colcord, Searsport, in Biological Chemistry.
Carolyn Adelle Hodgdon, Hampden Corner, in Greek.

Honorable Mention in the College of Law

Elmer John Burnham, Kittery.
Moses Harry Harris, Auburn.

Certificates in the School Course in Agriculture

Stephen Edward Abbott, Bethel.
Frank Harold Bickford, North Dixmont.
Ransom Clayton Packard, Brockton, Mass.

Reported to the Secretary of War for Publication in the Next United States Army Register as the Three Most Distinguished Students in the Military Department

James Gordon Wallace, Portland.
Harry Alvah Emery, North Anson.
John Percy Simmons, Belfast.

CATALOG OF STUDENTS

Major subjects are indicated as follows: Ag. Agriculture, Bl. Biology, Ch. Chemistry, Cv. Civics, Ce. Civil Engineering, Ee. Electrical Engineering, Eh. English, Fy. Forestry, Gm. German, Gk. Greek, Hy. History, Lt. Latin, Ms. Mathematics, Me. Mechanical Engineering, Ml. Modern Languages, Pm. Pharmacy, Pl. Philosophy, Ps. Physics, Rm. Romance Languages.

GRADUATE STUDENTS

Balentine, Florence, B. A., Bl. University of Maine, 1905	*Orono*	College St.
Colcord, Joanna Carver, B. S., Ch. University of Maine, 1906	*Searsport*	Main St.
Dow, Henry Kingman, B. A., Gm. University of Maine, 1903	*Old Town*	Old Town
Dunmore, Jennie Elizabeth, B. S. Simmons College, 1906	*Haverhill, Mass.*	College St.
Edwards, Dayton James, B. S., Bl. University of Maine, 1906	*Oxford*	Main St.
Fowles, Raymond Arthur, B. A., Pl. University of Maine, 1905	*Greenville*	Greenville
Godfrey, Ethel, B. L., Eh. Smith College, 1903	*Bangor*	Bangor
Jones, Gertrude May, B. S., Bl. University of Maine, 1906	*Corinna*	Corinna
Moots, Elmer Earl, B. C. E., Ms. Highland Park College, 1906	*Des Moines, Iowa*	Stillwater
Seabury, Ralph Lowe, B. S., Ch. University of Maine, 1905	*Yarmouth*	Main St.
Smith, Edward Henry, B. M. E., Ch. University of Maine, 1900	*East Sullivan*	East Sullivan
Simmons, Frederick Johnson, B. A., Hy. University of Maine, 1905	*Charleston*	Charleston
Smith, Nathan Rideout, B. A., Pl. Bates College, 1895	*Orono*	Main St.
Swain, Pearl Clayton, B. A., Eh. University of Maine, 1899	*Maynard, Mass.*	Maynard, Mass.
Whittier, Arthur Craig, B. S., Ch. University of Maine, 1905	*Farmington*	College St.

SENIORS

Aiken, Edith Nora, Lt.	*Brewer*	Mt. Vernon House
Alexander, Wm. Wesley Bannister, Ch.	*Everett, Mass.*	Ω Λ Υ House
Alton, Francis Osgood, Ee.	*Lynn, Mass.*	Main St.
Austin, Alton Arthur, Ag.	*Ridlonville*	Κ Σ House
Balentine, Marion, Ms.	*Orono*	College St.
Barrows, Arad Thompson, Ce.	*Burleigh*	16 Main St,
Barrows, Lucius Dwelley, Ce.	*Foxcroft*	Σ Α Ε House
Bates, John Thaxter, Me.	*Calais*	Σ Α Ε House
Bean, Ernest Daniel, Ce.	*Haverhill, Mass.*	302 Oak Hall
Bean, Perry Ashley, Ce.	*Albany*	301 Oak Hall
Bird, Sidney Morse, 2nd, Ag.	*Rockland*	Β Θ Π House
Black, Walter Wright, Me.	*Beverly, Mass.*	Σ Α Ε House
Brann, Benjamin Erwin, Ce.	*Waterville*	202 Oak Hall
Brawn, Elwin Dresser, Me.	*Dexter*	Β Θ Π House
Brown, Amon Benjamin, Ce.	*Camden*	Φ Γ Δ House
Burleigh, John Holmes, Eh.	*South Berwick*	Α Τ Ω House
Burns, Caleb Edgar Slocum, Ag.	*Fort Fairfield*	Φ Γ Δ House
Cayting, Arno Burr, Fy.	*Brewer*	111 Oak Hall
Claflin, Francis Marsh Albee, Ch.	*Upton, Mass.*	Park St.
Clayton, Robert Edmund, Ch.	*Bangor*	Κ Σ House
Coffin, Roy Selwin, Fy.	*Bangor*	Φ Κ Σ House
Connell, Bennett Robert, Ee.	*Houlton*	Σ Χ House
Cummings, Elmer Wallace, Ce.	*Paris*	Main St.
Davis, Charles Eugene, Ce.	*Bridgton*	Θ Ε House
Devereux, Rosmar Styer, Ce.	*Castine*	204 Oak Hall
Druery, Edward James, Ch.	*Augusta*	311 Oak Hall
Erskine, Fred Stoddard Neville, Ag.	*East Boston, Mass.*	Θ Ε House
Eveleth, Harry Pope, Ee.	*Greenville Junction*	Κ Σ House
Fagan, James Patrick Vincent, Ch.	*Old Town*	Old Town
Galland, Joseph, B. S., Ce.	*Biddeford*	Α Τ Ω House
Garland, Carlotte Nathaniel, Pl.	*Hampden*	Commons
Gellerson, Rex Carleton, Pm.	*Fort Fairfield*	Θ Ε House
Goodrich, Joe Kinsman, Cv.	*Skowhegan*	Κ Σ House
Goodwin, George Parlin, Cv.	*Skowhegan*	Φ Γ Δ House
Green, Herbert Henry, Ag.	*Spencer, Mass.*	3 Peters St.
Hall, William Dickson, Ml.	*Rockland*	Φ Γ Δ House
Hamlin, Roy Gilbert, Ee.	*Gorham, N. H.*	Φ Κ Σ House
Harlow, Edward Thomas, Ce.	*South Brewer*	111 Oak Hall
Harvell, John Perham, Me.	*Roxbury, Mass.*	Ω Λ Υ House
Hayward, Guy Edwin, Ml.	*Winthrop*	Φ Γ Δ House

Hodgkins, Alden E., Ms.	*Damariscotta Mills*	4 Forest St.
Hodgkins, Lincoln Hall, Ce.	*Bunker Hill*	Φ K Σ House
Holbrook, Franklin Pratt, Ce.	*Brooks*	101 Oak Hall
Hooper, Elmer Guy, Ce.	*West Lynn, Mass.*	N. Main St.
Hosmer, Fred Pote, Ch.	*Rockland*	Δ T Ω House
Hussey, Erwin Howard, Ce.	*Guilford*	203 Oak Hall
Hutchins, Wilbury Owen, Ce.	*Orland*	Oak Hall
Judkins, Ernest LaRoy, Ee.	*Skowhegan*	109 Oak Hall
Keirstead, Horton Wilmot, Ce.	*Oakland*	Σ X House
Knowlton, Herbert Austin, Ee.	*Pembroke*	Park St.
Lambe, Emerson Peavy, Ee.	*Calais*	209 Oak Hall
Lambe, Reginald Robert, Me.	*Calais*	Σ A E House
Lekberg, Carl Henry, Me.	*Worcester, Mass.*	Σ X House
Lisherness, Ernest, Ce.	*North New Portland*	Φ Γ Δ House
Lord, Arthur Russell, Ce.	*Ipswich, Mass.*	101 Oak Hall
MacDonald, Karl, Me.	*Belfast*	B Θ Π House
Macomber, Carlton Hambly, Me.	*Portsmouth, R. I.*	303 Oak Hall
McKenzie, Herman Ellis, Me.	*West Jonesport*	Old Town
Maddocks, Frank Everett, Ce.	*Bluehill*	203 Oak Hall
Malloy, Thomas Angelo, Ce.	*Lewiston*	K Σ House
Mansfield, Mildred Charlotte, Lt.	*Orono*	Bennoch St.
Martin, Charles Henry, Ce.	*Fort Fairfield*	Φ Γ Δ House
Matthieu, Joseph Clarence, Ee.	*Farmington*	212 Oak Hall
Merrill, Joseph Farrington, Ch.	*Auburn*	Main St.
Newman, Max Gibson, Ee.	*Fryeburg*	K Σ House
Nickels, Herbert Lewis, Ce.	*Cherryfield*	6 Main St.
Orne, Sidney Baxter, Me.	*Boothbay Harbor*	Myrtle St.
Packard, Harry Ellsworth, Ce.	*East Winthrop*	Σ A E House
Pennell, Alcot Johnson, Ee.	*Melrose Highlands, Mass.*	Oak Hall
Perry, Donald Cushman, Ee.	*Island Falls*	16 Main St.
Perry, Tedcastle Bigelow, Ee.	*Island Falls*	16 Main St.
Philbrook, Earle Walter, Ce.	*Milan, N. H.*	B Θ Π House
Pierce, Stephen Franklin, Ce.	*Windsorville*	Θ E House
Purington, Heber Penn, Ce.	*Jay*	Main St.
Quint, Raymon Alton, Ee.	*North Berwick*	B Θ Π House
Read, Carroll Arthur, Ee.	*Stillwater*	Stillwater
Reed, Lowell Jacob, Ee.	*Berlin, N. H.*	Φ K Σ House
Ridge, Reginald, Ce.	*Portland*	K Σ House
Rockwood, Noel Mumford, Me.	*Calais*	North Main St.
Rollins, Deane Whittier, Cv.	*Farmington Falls*	Φ Γ Δ House
Rounds, Albert Prentiss, Ce.	*Bridgton*	107 Oak Hall
St. Onge, Walter James, Ee.	*Dover*	Ω Λ Υ House

Sampson, Arthur Haskell, Ch.	*Gorham*	201 Oak Hall
Schoppe, William Freeman, Ag.	*West Auburn*	Σ A E House
Stetson, Everett Halliday, Ce.	*Auburn*	K Σ House
Stetson, Howard Carlton, Ce.	*Auburn*	Φ K Σ House
Stevens, Albert William, Ee.	*Belfast*	B Θ Π House
Stone, William Elmer, Me.	*South Brewer*	Φ K Σ House
Swift, Porter LaForrest, Me.	*Norway*	Φ K Σ House
Talbot, Richard Foster, Ag.	*Andover*	Σ A E House
Tate, Edith Mabel, Eh.	*East Corinth*	Mt. Vernon House
Tebbets, Charles Bucknam, Ce.	*Auburn*	Φ K Σ House
Toner, Ernest Leroy, Fy.	*Auburn*	Σ X House
Totman, Arnold Washington, Cv.	*Fairfield*	K Σ House
Washburn, Willis Flye, Ch.	*China*	A T Ω House
Weld, Moses Waldo, Me.	*Old Town*	Old Town
Williams, Benjamin Franklin, Ce.	*North Islesboro*	A T Ω House
Wilson, Elmer Josiah, Ee.	*Lynn, Mass.*	Σ X House
Wilson, Jesse Davis, B. A., Ce.	*Brunswick*	North Main St.
Witham, Lester Clyde, Ce.	*North Anson*	202 Oak Hall
Wyman, Abel Percival, Ce.	*Skowhegan*	Σ A E House
York, Verne Jerome, Ee.	*Bangor*	Bangor

JUNIORS

Bean, Anna Coffin, Ch.	*Haverhill, Mass.*	Campus
Bean, Chester Howe, Ce.	*Bethel*	301 Oak Hall
Beedle, Arthur Lawrence, Ee.	*South Gardiner*	16 Main St.
Blair, Arthur Adolphus, B. D., Pl.	*Old Town*	Old Town
Boyle, Claude, Ch.	*Dover*	A T Ω House
Brown, Sarah Ellen, Gk.	*Old Town*	Mt. Vernon House
Brownell, Chester Arthur, Ce.	*Newport, R. I.*	Θ E House
Chase, Daniel, Ms.	*Baring*	Σ A E House
Cobb, William Alfred, Ce.	*Auburn*	Φ K Σ House
Coleman, Everett Clinton, Ch.	*Boston, Mass.*	Ω A Υ House
Collins, Bernard Ira, Ce.	*Haverhill, Mass.*	308 Oak Hall
Cram, Edward Winslow, Cv.	*Portland*	K Σ House
Cummings, Robert Lincoln, Me.	*Gorham*	Φ Γ Δ House
Dixon, Leon Snell, Ce.	*Orono*	College St.
Dow, Owen Oscar, Cv.	*Hiram*	Φ Γ Δ House
Draper, Clifford Lester, Ee.	*Stoneham, Mass.*	Θ E House
Durgin, Albert Guy, Ch.	*Orono*	Middle St.
Ellis, Harold Milton, Eh.	*Hingham, Mass.*	3 Peters St.
Emery, Francis Philip, Me.	*Eastport*	Σ A E House
Estabrooke, Elizabeth Read, Eh.	*Orono*	Main St.

Farnsworth, James Pitt, Ee.	*Milbridge*	Θ E House
Fellows, Raymond, Cv.	*Bucksport*	Φ Γ Δ House
Fenn, Charles Henry, Ce.	*Portland*	Σ X House
Files, Frederick Whitney, Ee.	*Portland*	Θ E House
Fisher, Roy Haynes, Ce.	*Pepperell, Mass.*	College St.
Fogler, Ben Baker, Me.	*Skowhegan*	Σ X House
French, Cecil Sumner, Ee.	*Kingfield*	Φ K Σ House
French, Frank Danforth, Fy.	*Jonesport*	K Σ House
Gannett, James Adrian, Ee.	*Yarmouth*	Φ K Σ House
Hanscom, Arthur Snow, Ce.	*Leeds Junction*	Φ Γ Δ House
Hardison, Grover Merrill, Ce.	*Caribou*	Ω Λ Υ House
Harris, Bell Curry, Gm.	*Sherman Mills*	Old Town
Hill, William Andrew, Ce.	*Winterport*	Φ Γ Δ House
Hilliard, Stanley Tyng, Me.	*Old Town*	Φ Γ Δ House
Hopkins, George Jesse, Me.	*Bath*	B Θ Π House
Irish, Joshua Swett, Ag.	*Gorham*	207 Oak Hall
Jacobs, Joseph, Ee.	*West Boylston, Mass.*	3 Middle St.
Johnson, Charles Arthur, Ce.	*Berlin Mills, N. H.*	23 Peters St.
Kendrigan, John Thompson, Ce.	*Rockland, Mass.*	K Σ House
Knight, George Raymond, Ee.	*North Waterford*	Main St.
Lancaster, Howard Augustus, Ce.	*Old Town*	Old Town
Lanpher, Stacy Clifford, Gm.	*Sebec*	Ω Λ Υ House
Libby, Paul, Ce.	*Somersworth, N. H.*	302 Oak Hall
Locke, Samuel Barry, Fy.	*West Paris*	Σ X House
Lord, Leslie Roland, Ee.	*Poquonock, Conn.*	Σ X House
McNamara, William Stephen, Rm.	*Millville, Mass.*	212 Oak Hall
Matheas, Fred Walter, Ce.	*Bangor*	205 Oak Hall
Merrill, Anne Margaret, Rm.	*Auburn*	Bennoch St.
Meserve, Claude Pitman, Me.	*North Bridgton*	Σ A E House
Milliken, Earle Linwood, Ee.	*Westbrook*	A T Ω House
Miner, Henry LeRoy, Ch.	*Haverhill, Mass.*	A T Ω House
Mitchell, Robie Lawton, Cv.	*West Newfield*	Φ Γ Δ House
Morrison, James Joseph, Ee.	*Pembroke*	Park St.
Morton, Fred Constine, Ee.	*South Windham*	207 Oak Hall
Perkins, Howard Lewis, Ee.	*Augusta*	210 Oak Hall
Potter, Robert Eaton, Ce.	*Bath*	Σ X House
Rich, Harry Herbert, Ee.	*Bangor*	K Σ House
Richardson, Roy Henry, Ag.	*Old Town*	305 Oak Hall
Robinson, Philip Increase, Ee.	*Waterville*	Φ K Σ House
Sargent, Leslie Wheeler, Me.	*South Brewer*	B Θ Π House
Sawyer, William Robert, Cv.	*Milbridge*	K Σ House

Skofield, Perley Fiske, Ag.	*Houlton*	Campus
Smith, Herman Brackett, Me.	*Saco*	Φ K Σ House
Smith, Oscar Franklin, Ce.	*Calais*	A T Ω House
Smith, Raymond Judson, Fy.	*Skowhegan*	Φ Γ Δ House
Steward, Robert Kent, Ce.	*Skowhegan*	Φ Γ Δ House
Stuart, George Albert, Ag.	*Red Beach*	A T Ω House
Sturtevant, Merle Alton, Ps.	*Hebron*	Σ A E House
Thomas, Searle Fowler, Ee.	*Lincoln*	Φ K Σ House
Trask, Warren Dudley, Ce.	*Augusta*	K Σ House
Turner, Richard Clinton, Ag.	*Portland*	30 Main St
Vickery, Earle Nelson, Ee.	*Pittsfield*	Σ X House
Wakefield, Sylvia Serena, Ml.	*Saco*	Mt. Vernon House
Weston, Clarence McLellan, Ce.	*Madison*	Bennoch St.
Wilbur, Walter Edmund, Ee.	*Pembroke*	Park St.
Wood, Louis Carl, Ce.	*Berlin, N. H.*	Σ X House

SOPHOMORES

Albee, Guy Edwin, Ms.	*Machias*	Oak Hall
Austin, Thomas Dillon, Ag.	*Farmington*	A T Ω House
Barber, Clarence Wallace, Ag.	*Woodfords*	Commons
Barron, George Frank, Ee.	*Orono*	Forest St.
Bennet, DaCosta FitzMaurice, Cv.,	*Lubec*	Θ E House
Bibber, Ray Odin, Ce.	*Eastport*	7 Main St.
Black, William Milgate, Ce.	*Belfast*	103 Oak Hall
Blake, Harold Edwin, Pm.	*Saco*	North Main St.
Bowman, Harold Melville, Me.	*Salmon Falls, N. H.*	310 Oak Hall
Brann, Bertrand French, Ch.	*Bangor*	Bangor
Brewer, Ernest Malcolm, Ee.	*Bar Harbor*	Ω A Υ House
Brimmer, George Hollis, Fy.	*Brewer*	B Θ Π House
Brown, Wallace Francis, Ce.	*Yarmouth*	Main St
Bruce, Herbert Putnam, Ce.	*Lynn, Mass.*	Θ E House
Carlisle, George Thomas, Fy.	*North Edgecomb*	16 Main St.
Carter, Warren Alfred, Ch.	*Nobleboro*	Main St.
Chandler, Bernard Albert, Fy.	*New Gloucester*	Φ K Σ House
Chase, Florence Polleys, Hy.	*Baring*	Mt. Vernon House
Clement, James Donald, Ch.	*Belfast*	103 Oak Hall
Clemons, Samnel Wadsworth, Me.	*Hiram*	A T Ω House
Cleveland, Charles Calvin, Ag.	*Skowhegan*	18 Main St.
Conner, Warren Edward, Ce. ,	*Auburn*	Φ K Σ House
Cony, Daniel William, Ce.	*Augusta*	B Θ Π House
Corson, Preston Llewellyn, Ee.	*Wilton*	21 Middle St.
Cragin, Philbur Leroy, Ee.	*Woodfords*	63 Mill St.

Cram, Frederick Sutherland, Ce.	*Brunswick*	Σ A E House
Davis, Cyrus Hersey, Ee.	*Woodfords*	Campus
Eddy, Harold Frederick, Ee.	*Bangor*	Bangor
Edgcomb, Leslie, Ee.	*Kennebunk*	North Main St.
Emerson, Walter Lee, Ce.	*Orono*	B Θ Π House
Estabrooke, Carl Bertrand, Eh.	*Orono*	Main St.
Estey, Chester Arthur, Ee.	*Lisbon Falls*	35 Mill St.
Farnsworth, Alice Belle, Gm.	*West Sullivan*	Mt. Vernon House
Farrar, Cecil C., Lt.	*Guilford*	Old Town
Farwell, Howard Lovering, Me.	*Dorchester, Mass.*	Φ Γ Δ House
Finnigan, Edward Joseph, Ce.	*Bangor*	Ω A Υ House
Fogler, William Andrews, Ee.	*West Rockport*	Σ X House
French, Guy Clifton, Ce.	*Skowhegan*	109 Oak Hall
Fulton, Charles Melville, Ce.	*Effingham Falls, N. H.*	Θ E House
Gardner, Edward Earle, Pm.	*East Machias*	Σ A E House
Gerrity, Joe Warren, Cv.	*Bangor*	K Σ House
Gilbert, William Henry, Me.	*So. Glastonbury, Ct.*	Σ A E House
Haggett, Harold Daniel, Ce.	*Bath*	Ω A Υ House
Hall, Bertram Mellor, Me.	*Lawrence, Mass.*	Σ A E House
Hall, Earle Wilmer, Ee.	*Farmington*	Main St.
Ham, Philip Winthrop, Ce.	*Livermore Falls*	Φ K Σ House
Hamlin, Dunton, Ce.	*Orono*	Main St.
Hamor, George Howard, Ce.	*Bar Harbor*	Ω A Υ House
Harmon, Ralph Chase, Ee.	*Woodfords*	Σ X House
Harvey, Florence Evelyn, Mi.	*Orono*	Main St.
Harvey, Walter Ora, Me.	*Kenduskeag*	Θ E House
Harvey, Willis Lake, Ce.	*Orono*	Main St.
Henry, Ralph Morton, Ee.	*Cumberland Mills*	Mill St.
Higgins, Harrison Parker, Me.	*Somerville, Mass.*	Σ A E House
Hinckley, Edward Benjamin, Eh.	*Hinckley*	Φ K Σ House
Hinkley, Willard Merrill, Ee.	*West Jonesport*	Σ X House
Hodgins, Robert Lyle, Me.	*Hampden*	Φ Γ Δ House
Holton, Carl Russell, Ce.	*Boothbay Harbor*	Ω A Υ House
Jackson, Ralph Lysander, Ce.	*Jefferson*	Σ A E House
Jewett, John Nelson, Ce.	*Cherryfield*	Σ X House
Johnson, Howard Rich, Ee.	*So. Portland*	North Main St.
Jones, Laurence Vivian, Hy.	*Bangor*	K Σ House
Keating, Edmund Bernard, Ce.	*Salem, Mass.*	Mill St.
Keith, Ballard Freeze, Lt.	*Old Town*	Φ Γ Δ House
Kimball, Winfield Alfred, Fy.	*Norway*	Φ K Σ House
Kinghorn, Charles Wesley, Ee.	*Yarmouthville*	Forest St.
Knight, Frederick Daniel, Ee.	*Limerick*	Φ K Σ House

Knight, Mary Warren, Hy.	*Deer Isle*	Mt. Vernon House
Littlefield, Joseph Philip, Ee.	*Ogunquit*	A T Ω House
Littlefield, Philip Henry, Me.	*Portland*	Myrtle St.
Lockyer, Scott Sylvester, Fy.	*Eustis*	A T Ω House
Lynch, John Philip, Ph.	*South Berwick*	A T Ω House
McArthur, Chase, Gm.	*Milltown*	Park St.
Marsh, Harold Pinkham, Fy.	*Bangor*	B Θ Π House
Mason, Jesse Ham, Ch.	*Beverly, Mass.*	Σ X House
Mayo, Clarence Arthur, Ee.	*Hampden Corner*	B Θ Π House
Mayo, Norman Haskell, Ce.	*Bluehill*	Σ X House
Merriman, Merle Eli, Me.	*Portland*	Φ K Σ House
Miller, Harold Redmere, Ee.	*South Berwick*	Oak Hall
Mooney, Percy Patrick, Ee.	*Bangor*	Bangor
Moor, Leon Russell, Ee.	*Ellsworth*	303 Oak Hall
Moore, Irving Hartwell, Ee.	*Readfield*	B Θ Π House
Morgan, Edwin Randolph, Ee.	*Sangerville*	206 Oak Hall
Morrell, Harry Edwin, Ce.	*Lewiston*	312 Oak Hall
Morrison, Robley Howe, Ch.	*Rumford Falls*	Σ A E House
Morton, Edward Watts, Ag.	*Kennebunk*	Σ A E House
Nash, Henry Leighton, Ee.	*Cherryfield*	Σ A E House
Nason, Charles Jewell, P. M.	*Hampden*	Φ Γ Δ House
Paine, Charles Brooks, Ce.	*Eastport*	Main St.
Parker, Horace Albion, Ce.	*Livermore Falls*	307 Oak Hall
Patterson, Alfred Bassett, Me.	*Winslow*	307 Oak Hall
Penney, Paul Stinchfield, Ce.	*Augusta*	Park St.
Pettegrow, Herbert Tracy, Ce.	*East Machias*	Pine St.
Pike, Lewis Freeman, Fy.	*Milton, N. H.*	K Σ House
Plumly, Clinton Alley, Ee.	*Lincoln*	Φ K Σ House
Pray, Elmer Onsville, Ce.	*Kittery*	A T Ω House
Prescott, Glenn Carleton, Ce.	*Bradford, Mass.*	308 Oak Hall
Randall, James William, Ce.	*Freeport*	Ω Λ Υ House
Ray, Vinton Royal, Ce.	*Sabattus*	36 Main St.
Rich, Harold Arthur, Me.	*Bangor*	B Θ Π House
Richardson, Frank Cummngs, Ce.	*Jefferson*	Σ A E House
Richardson, Irene Clara, Rm.	*Old Town*	Mt. Vernon House
Ringwall, Frederick Algot, Ch.	*Bangor*	K Σ House
Roberts, Benjamin Lewis, Fy.	*Bangor*	Θ E House
Rollins, Kenneth Albert, Cv.	*Farmington Falls*	Φ Γ Δ House
Scales, James Grindle, Ch.	*Guilford*	Φ Γ Δ House
Shatney, Thomas Franklin, Fy.	*Orono*	28 Pine St.
Shaw, Christine Myrtle, Lt.	*Orono*	Park St.
Shaw, Cora Mae, Ms.	*Orono*	Park St.

Simmons, Francis Eaton, Me.	*Rockland*	Β Θ Π House
Smith, Allen G., Me.	*Jonesport*	Park St.
Smith, Dexter Southworth Johnson, Ee.	*Holden*	Holden
Smith, Harry Woodbury, Ag.	*Sangerville*	Park St.
Smith, Wilbur Olin, Ee.	*Peabody, Mass.*	Myrtle St.
Southwick, Everett Frost, Ag.	*Peabody, Mass.*	Myrtle St.
Steward, Helen Farwell, Hy.	*Skowhegan*	Mt. Vernon House
Sutton, Harry Edward, Hy.	*Orono*	Bennoch St.
Sweetser, George Roy, Cv.	*Hampden*	Commons
Thomas, Deane Stanley, Ee.	*Yarmouthville*	Θ Ε House
Torrey, Guy Ellicott, Ce.	*Dorchester, Mass.*	Κ Σ House
Towle, Elton LaForrest, Me.	*Portland*	Φ Γ Δ House
Wescott, Thurman Cary, Ce.	*Patten*	16 Main St.
White, Harry Alfred, Ce.	*Lynn, Mass.*	Κ Σ House
Williams, Thomas Charles, Ce.	*Salem, Mass.*	Mill St.
Woodbury, Dwight Augustus, Ms.	*Beverly, Mass.*	Σ Χ House
Worth, Edna Curtis, Lt.	*East Corinth*	Mt. Vernon House

FRESHMEN

Ames, Leroy Winfield	*Bangor*	Bangor
Andrews, Wales Henry	*Middleboro, Mass.*	Β Θ Π House
Arnold, Frances Elizabeth Stanislaus	*Orono*	North Main St.
Bagg, William Clarke	*Utica, N. Y.*	Β Θ Π House
Barker, Harold Louis	*Boston, Mass.*	Σ Χ House
Battles, James Edmund	*Frankfort*	Myrtle St.
Baylies, Wallace Brownell	*New Bedford, Mass.*	211 Oak Hall
Bennett, Leslie	*Paris*	Φ Κ Σ House
Berry, Earle Sylvester	*Malden, Mass.*	Σ Χ House
Berry, Stewart Francis	*Malden, Mass.*	Σ Χ House
Bibber, Noel Osbourne	*Eastport*	Main St.
Bigney, Frederick Rowe	*Greenville*	Ω Λ Υ House
Bird, Roy James	*South Paris*	Main St.
Blanchard, Ralph Childs	*Cumberland Center*	Main St.
Bragg, Lester Morse	*Stockton Springs*	Φ Γ Δ House
Brown, Daniel Grover	*South Paris*	Oak Hall
Burch, Joseph Francis	*Biddeford Pool*	Bennoch St.
Burke, Alfred Kimball	*Kennebunk*	Σ Λ Ε House
Callahan, Edgar Frederick	*Orono*	Water St.
Carle, Harry Pennell	*Portland*	Φ Γ Δ House
Chadbourne, Vaughn Russell	*Mattawamkeag*	Park St.
Chandler, Alfred Blanchard	*Yarmouthville*	Forest St.
Chase, Arthur Clifford	*Sheepscott*	Σ Λ Ε House

Chase, Walter Melville	*Bangor*	Bangor
Cleveland, Ralph Joseph	*Skowhegan*	Main St.
Clifford, Harold Linscott	*Orono*	Hill St.
Cole, Harold	*Paris Hill*	Main St.
Cole, Raymond Thurber	*South Portland*	Park St.
Collins, John Lambert	*Gardiner*	Main St.
Congdon, William Everett	*Woodfords*	Myrtle St.
Conlogue, Frederick Willis	*Houlton*	108 Oak Hall
Cook, Horace Jewett	*Waterville*	Α Τ Ω House
Crabtree, Alfred Evans	*Hancock*	Κ Σ House
Crocker, Ralph Willis	*Bangor*	Bangor
Cruickshank, Robert Bacon	*Akron, O.*	Β Θ Π House
Cummings, Chester Goodman	*Vanceboro*	10 Pine St.
Cutter, Benjamin Clifford	*Westbrook*	North Main St.
Danforth, Hugh Nagles	*Augusta*	Α Τ Ω House
Davis, Fred Dumont	*Brooks*	Myrtle St.
Davis, Ralph Cushman	*Auburn*	Κ Σ House
Davis, Walter Francis	*Milo Junction*	Old Town
Dennison, Harry Phillip	*Bridgetown, N. S.*	Orono House
Dow, Frank Seavey	*Sangerville*	206 Oak Hall
Dwinal, Olaf Windsor	*Auburn*	Mill St.
Dyer, Howard Kenneth	*Calais*	Σ Χ House
Dyer, John Raymond	*Truro, Mass.*	104 Oak Hall
Eaton, James Murchie	*Princeton*	Φ Γ Δ House
Everett, Jasper Willard	*Oxford*	Mill St.
Fassett, Malcolm Edward	*Portland*	Φ Γ Δ House
Fox, Kent Richard	*Bangor*	Β Θ Π House
Gardner, Albert Kinsman	*Rockland*	Mill St.
Gardner, Leroy Whittier	*Dennysville*	10 Pine St.
Gifford, George Endicott	*Salem, Mass.*	Mill St.
Goodrich, George Percy	*Cornish*	Mill St.
Goodrich, Merton Taylor	*Bingham*	North Main St.
Goodwin, Alexander Willard	*Vanceboro*	10 Pine St.
Gould, Ralph Wadlin	*Belfast*	College St.
Graham, Charles Liguori	*Brooklyn, N. Y.*	107 Oak Hall
Hall, Clifton Allison	*Brewer*	Φ Κ Σ House
Hall, Louise Frances	*Belfast*	Mt. Vernon House
Hamlin, Herbert Edwin	*Orono*	Main St.
Hardy, Simeon Joseph	*East Hampden*	Ω Λ Υ House
Harmon, W. Warren	*Old Orchard*	Ω Λ Υ House
Harward, Francis Eaton	*Brunswick*	4 Myrtle St.
Hassett, Harry Charles	*Rumford Falls*	Park St.

Hayes, Howard Wadlin	*Deering*	Myrtle St.
Hicks, Weston Milliken	*Portland, R. F. D. No. 4*	Pine St.
Hobbs, Ralph Everett	*Lynn, Mass.*	Θ E House
Holmes, Ralph Maynard	*Ellsworth*	14 Myrtle St.
Huntington, Frances Willard	*Lynn, Mass.*	Mt. Vernon House
Hurd, Arthur Edgar	*Lansing, Mich.*	Campus
Israelson, Philip Mosses	*Rumford Falls*	College St.
Jellison, Rupert A.	*Bar Harbor*	Ω Δ Υ House
Johnson, Chester Cleveland	*Portland*	Σ A E House
Jones, Roy Chandler	*Gardiner*	63 Mill St.
Jordan, Edith Luella	*Old Town*	Mt. Vernon House
Jordan, George King	*Westbrook*	63 Mill St.
Jordan, Harvey Herbert	*Waltham*	14 Myrtle St.
Kane, John Nolan	*Frankfort*	10 Pine St.
Keen, Lewis Albert	*South Paris*	112 Oak Hall
Ketchum, Charles Clayton	*Ashland*	108 Oak Hall
Kinney, Fay Delancy	*Dexter*	Θ E House
Kyes, Herman Winslow	*Ipswich, Mass.*	312 Oak Hall
Lamb, Ernest	*Utica, N. Y.*	B Θ Π House
Leary, Arthur Joseph	*Somersworth, N. H.*	304 Oak Hall
Leonard, Paul Cyprian	*Frankfort*	Myrtle St.
Libby, Albert Edwin	*Portland*	Pine St.
Lindley, John Turner	*South Paris*	Φ K Σ House
Littlefield, Roby Perkins	*Ogunquit*	Δ T Ω House
Logan, Orwell	*Brockton, Mass.*	Park St.
Lowell, Elmer Blaine	*West Farmington*	No. Main St.
Maddox, Austin Louis	*Ellsworth*	14 Myrtle St.
Merrill, Dimon Emery	*Alfred*	Park St.
Merrill, Walter Scott	*Skowhegan*	College St.
Moore, Arthur Scudder	*West Lynn, Mass.*	Φ K Σ House
Murphy, Cyrus William, Jr.	*West Kennebunk*	Park St.
Norton, Raymond Pratt	*Dover*	Ω Δ Υ House
Nucci, James Francis	*Brooklyn, N. Y.*	107 Oak Hall
Olsen, William Curtis	*Bronxville, N. Y.*	B Θ Π House
Parker, Clarence Douglas	*Portland*	Θ E House
Parsons, Charles William	*East Machias*	Pine St.
Parsons, Arthur Hudson	*Lynn, Mass.*	Θ E House
Pettey, Franklin William	*Fall River, Mass.*	College St.
Philbrook, John Neal	*Woodfords*	Myrtle St.
Phinney, Chester Squire	*Pawtucket, R. I.*	306 Oak Hall
Pickup, Herbert Wilfred	*Ipswich, Mass.*	209 Oak Hall
Porter, Charles Augustus Cushman	*Bangor*	Φ K Σ House

Pratt, Charles Oland	*Revere, Mass.*	Θ E House
Redman, Ralph Woodbury	*Corinna*	104 Oak Hall
Reed, Geneva Alice	*Orono*	College St.
Reed, Marshall Everett	*Roxbury*	College St.
Robinson, John Tyler	*Harvard, Mass.*	Pine St.
Rose, Joseph George	*Brooklyn, N. Y.*	110 Oak Hall
Rowe, Sylvanus Charles	*Yarmouth*	Forest St.
Royal, Harold Merton	*Hermon*	Bennoch St.
Russell, Edward Giddings	*Eastport*	Σ A E House
Sawyer, Frank Sleeper	*Sabattus*	Mill St.
Sawyer, Nathan Howard	*Cape Elizabeth*	69 Mill St.
Schierloh, August Herman	*Brooklyn, N. Y.*	Σ A E House
Sevrens, Oliver Fiske	*North Woburn, Mass.*	Ω Λ Υ House
Simonton, Philip Downing	*Yarmouthville*	Forest St.
Smith, Charles French	*Skowhegan*	10 Pine St.
Snow, Edward Notley	*Skowhegan*	10 Pine St.
Springer, George Edwin	*Portland*	Θ E House
Stanley, Winthrop Hamor	*Hull's Cove*	Ω Λ Υ House
Stanwood, George Sidney	*Rumford Falls*	A T Ω House
Staples, Joseph Henry	*Bangor*	210 Oak Hall
Stevens, Roy Farnum	*Westbrook*	Φ Γ Δ House
Stickney, Charles Edwin	*Portland*	Φ Γ Δ House
Stinchfield, Otis Decker	*Danforth*	Σ A E House
Stobie, John William	*Waterville*	A T Ω House
Stoddard, Winfred Eugene	*Guilford*	Θ E House
Stover, Isaac Maxwell	*Erwinna, Pa.*	Campus
Sweetser, Herman Pittee	*Cumberland Center*	Σ A E House
Tobey, Ray Wentworth	*Fairfield*	69 Mill St.
Tomlinson, Nora	*Brantford, Ont.*	Main St.
Travis, James Irving	*Machiasport*	Σ A E House
Tucker, Charles Henry	*Kittery Depot*	A T Ω House
Tuell, Edwin Emerson	*Augusta*	B Θ Π House
Wadsworth, Francis George	*Sanford*	Main St.
Wadsworth, George Sabine	*Portland*	Main St.
Wallace, George Alexander	*Portland*	B Θ Π House
Webster, George Albert	*Farmington*	North Main St.
Weeks, Harold Everett	*Augusta*	Mill St.
Welsh, Charles Leland	*Lynn, Mass.*	K Σ House
Wentworth, George Jacobs	*Kennebunk Beach*	Peters St.
Wentworth, William Hiram	*Somersworth, N. H.*	Σ X House
Wheeler, Stanley Mathews	*South Paris*	Φ K Σ House
White, Myra Isabel	*Orono*	Mill St.

Wiley, Fred Everett	*Hartford, Ct.*	35 Mill St.
Winters, Amos Arthur	*Waterville*	North Main St.
Woods, Harry Morgan	*Orono*	55 Main St.
Workman, Thurlow Tracy	*Sullivan Harbor*	Ω Λ Υ House

SHORT PHARMACY COURSE

SECOND YEAR

Beal, Arthur Nathaniel	*Lisbon Falls*	309 Oak Hall
Butterfield, Carroll Curtis	*Dover*	Θ E House
Findlen, Thomas Miles	*Caribou*	Oak Hall
Riddle, Harry Colburn	*Monson*	Λ T Ω House
Saunders, William Houston	*Deer Isle*	Commons
White, Frank Manly	*Vinalhaven*	Φ Γ Δ House

FIRST YEAR

Adams, Percy	*Annapolis, Md.*	North Main St.
Bartlett, Fred Ellward	*Westbrook*	Ω Λ Υ House
Bradish, Howard Gilson	*Calais*	Σ Λ E House
Fulton, Ellwyn Mortimer	*Blaine*	Σ X House
Kerr, Edgar John	*Newport, R. I.*	52 Main St.
Morin, Theodule L.	*Fort Kent*	Orono House
Ormsby, William Herbert	*S. Portland, R. F. D. No. 8*	Myrtle St.
Ridlon, Myron Herbert	*Kezar Falls*	Bennoch St.
Sewall, Howard Newton	*York Village*	North Main St.
Ward, George Campbell	*Kennebunk*	Λ T Ω House

SPECIAL STUDENTS

Anderson, William Lewis, Jr.	*Hartland*	Φ Γ Δ House
Berry, Albert Ivory	*Biddeford*	208 Oak Hall
Corning, Grover Trites	*Lynn, Mass.*	Myrtle St.
Crowell, Philip Holmes	*Bangor*	Λ T Ω House
Cushman, Wesley George	*West Waterford, Vt.*	North Main St.
Day, Lester Scott	*Wiscasset*	Main St.
Deering, George Percy	*Winslow's Mills*	Θ E House
Doolittle, Albert Whiting	*Hackensack, N. J.*	Park St.
Drew, Percy Allen	*Orono*	B Θ Π House
Ellis, Harold	*Brewster, Mass.*	Pine St.
Evans, George	*Bangor*	106 Oak Hall
Farnham, Harry Lester	*Lynn, Mass.*	Θ E House
Farnham, Walter Elwood	*Canaan*	K Σ House
Fortier, Frank Eugene	*Turner Center*	Campus

Hackett, Joseph James	*Newport, R. I.*	304 Oak Hall
Hall, Harold Worcester	*Augusta*	Β Θ Π House
Hughes, Melvine Russell	*Bath*	North Water St.
Hutchinson, Arthur Nash	*Cherryfield*	Σ Χ House
Jones, Albert Heald	*Union*	Α Τ Ω House
Knight, Mattie Grover	*Deer Isle*	Mt. Vernon House
Knowlton, Daniel Fred	*Lowell, Mass.*	1 Bennoch St.
LaMarche, George Everett	*Orono*	Oak St.
Leland, Clarence Roy	*Mechanic Falls*	North Main St.
Leslie, Edward Warren	*Millinocket*	Oak Hall
McKenney, Blake	*Bangor*	Bangor
MacLean, Daniel Wallace	*Eastport*	College St.
Merriam, Frank Edmund	*Skowhegan*	Main St.
Metcalf, Donald Clifton	*Augusta*	Β Θ Π House
Mitchell, Sanford Stevens	*Cherryfield*	Main St.
Paine, Sherman Rogers	*Eastport*	Φ Γ Δ House
Peres, Henry Palacio	*Lima, Peru*	105 Oak Hall
Pickering, Winthrop Hamilton	*New Haven, Ct.*	110 Oak Hall
Potter, Benjamin Lawrence	*Litchfield*	36 Main St.
Richards, Grover Cleveland	*Portland*	Mill St.
Rogers, Frederick Drummond	*Richmond*	Σ Χ House
Scales, Eugene Mudgett	*Guilford*	College St.
Shaw, Hugh Earle	*Greenville*	Κ Σ House
Smith, George Lewis	*Long Cove*	Σ Χ House
Taylor, Russell Shepard	*Skowhegan*	Main St.
Todd, Arthur Lee	*Georgetown*	Pine St.
Tremaine, Arthur Edward	*Halifax, N. S.*	309 Oak Hall
Walker, Harold Edward	*Sabattus*	Mill St.
Whipple, LeRoy Francis	*Pawtucket, R. I.*	Κ Σ House
Wildes, Gordon Lunt	*Skowhegan*	Κ Σ House
Wilkins, Lyle Law	*Portland*	Myrtle St.
Wood, Frank Foster	*Old Town*	Old Town
Wright, Harold Williams	*Reading, Mass.*	Myrtle St.
Zatlin, Louis Edward	*St. Louis, Mo.*	Mill St.

SCHOOL OF AGRICULTURE

SECOND YEAR

Colley, Albert Chester	*Denmark*	Mill St.
Soule, Malcolm Montgomery	*South Freeport*	Mill St.

FIRST YEAR

Comins, Frederick Granville	*Brooklyn, N. Y.*	63 Mill St.
Cook, Alfred Searles	*Presque Isle*	Main St.

Cook, Walter Arthur	*Milton, Mass.*	Park St.
Fogg, George Phillips	*Hull's Cove*	63 Mill St.
Lindsay, Alvin Harold	*Carroll*	35 Mill St.
McKay, Christopher Adle	*Calais*	North Main St.
Ramsdell, Harvey Lincoln	*Addison*	63 Mill St.
Twitchell, Bernard Franklin	*South Paris*	112 Oak Hall

SUMMER SESSION

(Abbreviations indicate subjects taken.)

Albee, Guy Edwin	*Machias*	Gm., Ms., Eh.
Allen, Caroline French	*Bangor*	Rm., Hy., Eh., Gm.
Alexander, William Wesley Bannister	*Everett, Mass.*	Ch.
Arnold, Frances Elizabeth Stanislaus	*Orono*	Ms.
Austin, Thomas Dillon	*Farmington*	Eh., Ch., Bl.
Barker, Harold Louis	*Boston, Mass.*	Ms., Rm.
Berry, Albert Ivory	*Biddeford*	Ms.
Bragdon, Kenneth Edward	*East Sullivan*	Rm., Ps.
Brown, Jennie Christiana	*Orono*	Ms., Ch., Pl.
Cleveland, Charles Calvin	*Skowhegan*	Eh., Ms.
Coleman, Everett Clinton	*Boston, Mass.*	Pl., Gm., Ms., Bl.
Crafts, William Henry	*Mt. Desert*	Ch.
Cram, Edward Winslow	*Portland*	Ms., Pl., Rm.
Davis, Maud Marie	*Veazie*	Hy., Eh., Rm.
Durgin, Albert Guy	*Orono*	Rm., Bl., Hy., Ch.
Estabrooke, Carl Bertrand	*Orono*	Ms., Rm.
Estabrooke, Elizabeth Read	*Orono*	Rm.
Estabrooke, Marion Corthell	*Orono*	Rm.
Fowler, Abbie May	*Sangerville*	Hy., Pl., Eh.
Galger, George Homer	*Boston, Mass.*	Pl.
Gellerson, Rex Carleton	*Fort Fairfield*	Pl.
Grant, Edith	*Bangor*	Eh., Pl.
Grant, Emogene	*Bangor*	Eh., Pl.
Hamilton, June Marie	*Orono*	Hy., Pl.
Harvey, Florence Evelyn	*Orono*	Bl., Eh.
Kelleher, Marion Gertrude	*Orono*	Eh., Pl., Hy.
Latno, Alice Mae	*Orono*	Lt., Rm., Eh.
McCue, William Coleman	*Berwick*	Eh., Hy., Ps.
Merriam, Charles Bailey	*Prout's Neck*	Ms., Ch.
Mitchell, Sanford Stevens	*Cherryfield*	Ps., Hy., Bl.
Morey, Francina	*Otis*	Lt.
Morey, Mabel	*Otis*	Eh., Ms.
Mosher, Frances Belle	*Orono*	Gm., Pl.

O'Brien, Harriet Ella	*Thomaston*	Lt., Eh.
Parsons, Gertrude Mary	*North Newcastle*	Lt., Eh., Pl.
Peabody, Ellen Holway	*Machias*	Gm., Pl., Eh., Bl.
Perkins, Lena Georgie	*Oxford*	Eh., Bl., Pl.
Pierce, Louise Norris, B. A. Wellesley, 1900	*Old Town*	Pl., Hy., Eh.
Reed, Geneva Alice	*Orono*	Ms.
Reed, Philip Page	*Orono*	Rm., Ms., Hy.
Rideout, Whitney John	*Foxcroft*	Ps., Ch.
Sampson, Arthur Haskell	*Gorham*	Ps., Ch., Hy.
Shaw, Angie Edwina	*Orono*	Eh., Pl.
Shaw, Christine Myrtle	*Orono*	Ms., Rm.
Shaw, Cora Mae	*Orono*	Ms., Rm.
Smith, Edward Henry, B. M. E. University of Maine, 1900	*East Sullivan*	Ch.
Smolinsky, Samuel Wolff	*New York, N. Y.*	Rm., Gm., Ms., Ch.
Stanley, Winthrop Hamor	*Hull's Cove*	Ps., Hy., Rm.
Staples, Joseph Henry	*Bangor*	Rm., Eh., Ms.
Steinbach, Edward Sargent	*Orange, N. J.*	Rm., Ms.
Stevens, Albert William	*Belfast*	Ch.
Stevens, Neil Everett	*Auburn*	Ps., Ch.
Stover, Isaac Maxwell	*Erwinna, Pa.*	Ms., Eh.
Stowell, Clarence Warner	*Providence, R. I.*	Rm., Ch.
Tooker, Thomas Cox, B. A. Colby College, 1896	*Cherryfield*	Ps., Lt., Hy.
Varney, Ada Susan	*Brewer*	Eh.
Ware, Amy Estell	*Bangor*	Gm., Hy., Eh.
Wass, Clifton Eunis	*Sangerville*	Rm., Gm., Pl.
White, Harry Alfred	*Lynn, Mass.*	Eh., Rm., Pl.
Wood, Frank Foster	*Old Town*	Rm., Ps., Eh.

THE COLLEGE OF LAW

GRADUATE STUDENTS

Blanchard, Benjamin Willis, LL. B. University of Maine, 1904	*Bangor*	118 Congress St.
Bowker, Edgar Marshall, LL. B. George Washington University, 1902	*Whitefield, N. H.*	
Bridges, Corril Ellsworth, LL. B. Albany Law School, 1887	*Charlestown, Mass.*	
Brown, Leon Gilman Carleton, LL. B. University of Maine, 1905	*Milo*	

Clough, George Edwin, LL. B. *Monson, Mass.*
University of Maine, 1904
Colby, James Adams, LL. B. *Lynn, Mass.*
University of Maine, 1906
Cook, Harold Elijah, LL. B. *Waterville*
University of Maine, 1900
Davis, Waldo Trevor, B. A., LL. B. *Worcester, Mass.*
Dartmouth College, 1901. University of Maine, 1905
Dunn, Patrick Henry, LL. B. *Bangor* Bass Building
University of Maine, 1902
Folsom LeRoy Rowell, B. S. *South Norridgewock*
University of Maine, 1895
Foster, Walter Herbert, LL. B. *Dorchester, Mass.*
University of Maine, 1905
Fox, Lewis Edwin, LL. B. *Worcester, Mass.* 20 Everett St.
University of Maine, 1906
Graton, Claude Dewing, LL. B. *Burlington, Vt.*
University of Maine, 1900
Heard, Carlos Clayton, B. A. *Biddeford*
Yale University, 1896
Johnson, William Asbury, LL. B. *Milo*
University of Maine, 1905
Kenniston, Hartley Garfield, LL. B. *Bangor* 38 Court St.
University of Maine, 1902
Libby, Arthur Stephen, B. A. *Spartanburg, S. C.*
University of Maine, 1903
Linehan, Daniel Joseph, LL.B. *Haverhill, Mass.*
University of Maine, 1905
Lord, Harry, LL. B. *Bangor* 82 Cumberland St.
University of Maine, 1902
Merrill, John Bryant, LL. B. *Bangor* 18 Jefferson St.
University of Maine, 1904
Noble, Ernest Eugene, B. A., LL. B. *Portland*
Colby College, 1897. University of Maine, 1903
Perkins, DeForest Henry, Ph. B., M. A., LL. B. *Skowhegan*
University of Maine, 1900, 1905. Illinois College of Law, 1906
Putnam, Varney Arthur, B. A., LL. B. *Danforth*
Colby College, 1899. University of Maine, 1902
Plumstead, Frank, B. A., LL. B. *Bangor* 75 Hammond St.
Bates College, 1896. University of Maine, 1901
Record, Lewis Stillman, Ph. B., LL. B. *Worcester, Mass.*
Brown University, 1902. University of Maine, 1905

Reid, Charles Hickson, LL. B. University of Maine, 1903	*Bangor*	60 Lincoln St.
Robinson, Curville Charles, LL. B. University of Maine, 1905	*Flatbush, N. Y.*	
Robinson, William Henry, LL. B. University of Maine, 1902	*Bangor*	42 Hammond St.
Selkirk, Robert William, LL. B. University of Maine, 1902	*Boston, Mass.*	
Violette, Nil Louis, B. A., LL. B. St. Mary's College. University of Maine, 1903	*Van Buren*	
Waterhouse, William Henry, LL. B. University of Maine, 1900	*Old Town*	

SENIORS

Andrews, Percy Melville, B. A. Colby College, 1901	*Portland*	25 State St.
Archibald, Bernard, B. A. Bowdoin College, 1904	*Houlton*	Y. M. C. A. Bldg.
Bangs, Harry Edgar	*Freedom*	79 Summer St.
Buckley, John	*Stafford Springs, Conn.*	49 High St.
Campbell, James DeWitt Howard University, College and Law School	*Washington, D. C.*	14 Franklin St.
Clark, Jerome Borden	*West Gouldsboro*	71 Summer St.
DeWolfe, Robert William	*Portland*	239 Essex St.
Dudley, John Perley Colby College	*Mapleton*	49 High St.
Finnigan, James Patrick	*Bangor*	12 Summer St.
Keegan, John Joseph	*Lubec*	49 High St.
Monroe, Edward Roy	*Portland*	74 Third St.
Moody, John Franklin, Jr., B. A. Colby College, 1900	*Auburn*	25 State St.
O'Halloran, Thomas Henry University of Vermont	*Marlboro, Mass*	Y. M. C. A. Bldg.
Perry, Lawrence Swift	*New Bedford, Mass.*	125 Grove St.

JUNIORS

Blossom, Charles Albert Gooding	*New Bedford, Mass.*	[Beta Theta Pi, Orono
Burgess, Frank Beaumont	*Sangerville*	Y. M. C. A. Bldg.
Davidson, Edward Burleigh	*York Village*	Y. M. C. A. Bldg.
Driscoll, George Alexander	*Springfield, Mass.,*	24 Ohio St.

Gardner, Silas Henry	*Brockton, Mass.*	[Beta Theta Pi House, Orono
Godfrey, Edward Rawson Bowdoin College, 1899	*Bangor*	172 Kenduskeag Ave.
Greeley, Harry Burton	*Hampden*	Hampden
Hamilton, Willard Packard, B. A. Bates College, 1895	*Caribou*	111 Fourth St.
Holman, William Harrison	*Dixfield*	316 Hammond St.
Leary, Thomas Edward, B. S. University of Maine, 1904	*East Hampden*	East Hampden
Maxwell, James Davidson	*Bangor*	27 Grant St.
Nolan, Harry McDonald	*Haverhill, Mass.*	100 Ohio St.
Rideout, Morton Howard	*Bangor*	Cor. Congress and [Fountain Sts.
Ridlon, Horace Denver	*Stetson*	23 Jefferson St.
Seavey, Ernest Linwood	*Boston, Mass.*	46 Court St.
Skillin, Carroll Brown	*North Yarmouth*	25 State St.
Waldron, William Linscott, B. A. Colby College, 1899	*Waterville*	5 Maxim Court

FIRST YEAR

Anderson, Albert Edward	*Portland*	239 Essex St.
Brackett, Harry Mortimer	*Berwick*	22 Ohio St.
Bridgham, Edward William	*Bridgton*	46 Court St.
Elder, Harry Robertson	*Chicopee Falls, Mass.*	239 Essex St.
Ellis, Henry Allan	*Yarmouth, Mass.*	Orono
Emery, James Edgar	*Bangor*	49 High St.
Emery, Oscar Harris	*Bar Harbor*	123 Main St.
Fitz-Randolph, Reginald Boston University, College and Law School	*Boulder, Colo.*	239 Essex St.
Fraser, William Clayton	*Taunton, Mass.*	48 Summer St.
Goss, Harold Isaac	*Berwick*	48 Summer St.
Hammond, Nathaniel M.	*Wilton*	316 Hammond St.
Kiernan, James Francis Brown University	*Warcham, Mass.*	Y. M. C. A. Bldg.
Mason, Walter Lee Fogg	*Brooks*	13 Bower St.
May, Seth University of Maine	*Auburn*	239 Essex St.
Morrison, Roy	*Saco*	Y. M. C. A. Bldg.
Paul, Seneca Arthur	*Garland*	247 Harlow St.
Peters, Andrew John Wadsworth Boston College of Physicians and Surgeons	*Bangor*	84 Columbia St.

Riggs, Verne Lester	*Livermore Falls*	Y. M. C. A. Bldg.
Sanders, Thomas Andrew	*Sangerville*	50 Jefferson St.
Small, Cyrus Fremont	*Caribou*	Y. M. C. A. Bldg.
Snow, Forrest Belmont	*Bluehill*	48 Summer St.
Thwing, Francis Drake	*Newton, Mass.*	79 Summer St.
Toole, Christopher, Jr.	*Bangor*	St. James Hotel

SPECIAL STUDENTS

Chandler, Carroll Delwin	*Bangor*	22 Short St.
Farnsworth, Omar Libby	*Caribou*	28 Second St.
Huntley, Ernest Devenport	*Harrington*	5 Maxim Court
Lewis, Charles Goodell	*New Bedford, Mass.*	49 High St.
Pendleton, Harold Desmond	*Islesboro*	20 Third St.

SHORT WINTER COURSES IN AGRICULTURE.

Baxter, G. E.	St. John, N. B.
Benner, Merton Adan	Waldoboro
Brown, Carl Levern	Norway
Brown, Ernest Linwood	Norway
Clements, Elmer Henry	Winterport
Costellow, Charles Wesley	Sanford
Dillingham, Charles Albert	Bangor
Goodell, Everett Edwin	Bangor
Lane, Frank Pike	Bangor
McQuaide, Thomas Wilson	Mt. Vernon
Merrill, Harry True	Sabbath Day Lake
Ordway, Myra Arnold	Searsport
Parker, Roland Keyes	West Boyleston, Mass.
Robinson, Irving Osgood	St. Albans
Schmincke, Adolph	Roselle, N. J.
Towle, Edward Weeks	North Vassalboro
Woodward, Lester Mason	Auburn

GENERAL SUMMARY

Faculty

Professors	32
Assistant Professors	7
Instructors	26
Lecturers	6
Tutors	2
Assistants and Other Officers	17
Total	90

College of Arts and Sciences	35
College of Agriculture	29
College of Technology	38
College of Pharmacy	27
College of Law	14
Agricultural Experiment Station	17

Members of the general faculty are included in the faculties of the separate colleges when they give courses that are required therein.

Students

Graduate Students		15
Seniors		102
Juniors		76
Sophomores		126
Freshmen		152
Short Pharmacy, Second year	6	
First year	10	16
Special Students		49

School of Agriculture, Second year	2	
First year	8	10
Summer Term		60
Short Agricultural		17
College of Law, Graduate Students	31	
Seniors	14	
Juniors	17	
First year	23	
Special Students	5	90
		713
Duplicated		26
Total		687

Classification by Residence

Maine, by counties:		
Androscoggin	28	
Aroostook	22	
Cumberland	70	
Franklin	13	
Hancock	27	
Kennebec	29	
Knox	11	
Lincoln	13	
Oxford	34	
Penobscot	131	
Piscataquis	28	
Sagadahoc	6	
Somerset	30	
Waldo	20	
Washington	50	
York	34	546

Colorado	1	
Connecticut	5	
District of Columbia	1	
Iowa	2	
Maryland	1	
Massachusetts	87	
Michigan	1	
Missouri	1	
New Hampshire	12	
New Jersey	3	
New York	10	
Ohio	1	
Pennsylvania	1	
Rhode Island	7	
South Carolina	1	
Vermont	2	136
New Brunswick	1	
Nova Scotia	2	
Ontario	1	
Peru, S. A.	1	5
		687

CLASSIFICATION BY COLLEGES

College of Arts and Sciences	127
College of Agriculture	56
College of Technology	391
College of Pharmacy	23
College of Law	90
	687

INDEX.

	PAGE
Absence from examinations,	31
Administration, officers of,	9
Admission,	39
by certificate,	41
by examination,	40
general requirements,	41
local examinations for,	40
of college graduates,	39
of special students,	40
preliminary examinations for,	40
requirements for,	41
to advance standing,	39
to College of Law,	139
to special and extension courses,	40
Agricultural chemistry,	60
Agricultural Experiment Station,	145
building,	21
Council,	6
equipment,	147
faculty,	145
investigations,	147
object,	146
publications,	148
Agriculture, College of,	112
correspondence courses,	118
extension courses,	118
faculty,	112
school course,	116
special courses,	116
winter courses,	117
Agronomy,	49
course,	114
Alumni associations,	7
Alumni hall,	20
Animal Industry,	51
course,	114
Appointments,	154
Art,	77
museum,	25
Arts and Sciences, College of,	100
degrees,	101
departments,	101
faculty,	100
Associations,	26
Astronomy,	83
Athletic field,	24
Bacteriology,	53

PAGE

Battalion, ... 91
Bibliography, ... 52
Biological chemistry, ... 60
Biology, ... 52
Board, ... 35
Bond, ... 36
Botany, ...55, 103
Buildings and equipment..... 19
Bulletins of the experiment station, ... 148
Calendar, ... 3
Catalog, annual, ... 27
Certificate, admission by,..... 39
Certificate board, ... 41
Certificates, in agriculture,..... 116
Chemical course, ... 120
Chemical Engineering course,... 122
Chemistry, ...57, 104
Civil Engineering, ... 61
course, ... 123
Civics, ... 61
Classical course, ... 102
Coburn Hall, ... 19
Commencement, exercises of, 1905, ... 149
list of speakers, 1905,..... 154
parts, ... 32
Committees of the faculty,..... 14
Correspondence courses, ... 118
Courses of study:

PAGE

Agricultural, ... 113
Agronomy, ... 114
Animal Industry, ... 114
Chemical, ... 120
Civil Engineering, ... 123
Classical, ... 102
Electrical Engineering, ... 128
Forestry, ... 130
Horticultural, ... 114
Law, ... 140
Mechanical Engineering, ... 125
Mining Engineering, ... 130
Pharmacy, ...91, 134
Scientific, ... 102
Short Pharmacy, ... 136
Special, ... 40
Dairy building, ... 22
Dairying, winter course,..... 117
Declamations, ... 69
sophomore prize, ...38, 69
Degrees, ... 33
advanced, ... 34
Degrees conferred, 1906..... 149
Departments of instruction,.... 49
Deposit, ... 36
Dormitories, ... 36
Drawing, ... 88
Drill, hall, ... 30
military, ...29, 90

	PAGE
Economics,	64
Education,	65
Electrical engineering,	66
course,	128
Endowment of the University,	18
English,	69, 104
Entomology,	54
Entrance, dates of examinations,	40
examinations,	40
requirements,	41
Essays,	70
Establishment of the University,	17
Examinations, arrearage,	31
entrance,	40
rules, with regard to,	31
Excuses,	31
Expenses of students,	34, 110, 140
Faculty, University,	9
Agriculture,	112
Arts and Sciences,	100
Classification,	176
Experiment Station,	145
Law,	138
Pharmacy,	133
Summer term,	100
Technology,	119
Farm buildings,	23
Fees, laboratory,	35
Fernald Hall,	19
Forestry,	73
course,	130
Fraternity houses,	23
French,	95, 105
German,	74, 105
Graduation, requirements for,	98
Greek,	75
preparatory courses,	77
sculpture,	76
Gymnasium,	30
Herbarium,	26
Histology, animal,	54
plant,	55
History,	78, 106
Holmes Hall,	21
Honorary society,	27
Honors,	32
conferred, 1906,	154
Horticultural, building,	22
course,	114
Horticulture,	80, 114
special course in,	116
Income of the University,	18
Infirmary,	24
International law,	64
Italian,	97

	PAGE
Junior exhibition,	38
speakers, 1906,	154
Kidder scholarship,	37
Kittredge loan fund,	37
Laboratory charges,	35
Latin,	81, 106
Law, college of,	138
admission,	139
advisory board,	5
courses,	141
degrees,	140
expenses,	140
Law, college of:	
faculty,	138
methods of instruction,	139
Library,	21, 24, 109
Literati,	27
Loans,	37
Logic,	93
Lord Hall,	20
Maine Bulletin,	28
Mathematics,	83, 106
Mechanical engineering,	85
course,	125
Mechanics and Drawing,	88
Medicine, preparation for,	102
Methodology,	65
Military, drill,	29, 90
Military, drill:	
instruction,	29
science, courses in,	90
science, requirements in,	29
Military uniform,	29
Mineralogy,	58
Mining Engineering Course,	130
Mt. Vernon House,	23
Museum,	25, 99
Nature study,	107
Oak Hall,	19
Observatory,	20, 109
Optics,	95
Organization of the University,	98
Organizations,	26
Pedagogy,	65, 108
Pharmacy, college of,	133
course,	91
faculty,	133
short course,	136
Phi Kappa Phi,	27
Phi Kappa Phi, members,	154
Philological Club,	26
Philosophy,	93
Physical training,	30
Physics,	94, 109
Physiology,	53
Political Economy,	64

PAGE

Power house, ... 22
Prizes, ... 37
awarded, 1906, ... 152
Psychology, ... 93
Publications, ... 27
Reading room, ... 25
Regulations of the University,. 31
Reports, of the Experiment Station, ... 148
of standing, ... 32
of the University, ... 27
Requirements, for admission,... 43
for graduation, ... 98
Rhetoric, ... 70
Romance Languages, ... 95
Rooms, ...36, 140
Scholarship honors, ... 32
Scholarships, ... 37
School course in agriculture,... 116
Scientific courses, ... 102
Short courses, ... 116
Societies, ... 26
Sociology, ... 64
Sophomore prize declamations, 38, 69
speakers, 1905, ... 154
Spanish, ... 97
Special courses, ... 116
Special students, ... 40

PAGE

Students, catalog of,..... 156
classification of, ... 176
number of, ... 176
standing of, ... 31
Studies, quota of,..... 31
Summer Term, ... 102
courses, ... 103
expenses, ... 110
faculty, ... 100
Surveying, ... 61
Technology, college of,..... 119
faculty, ... 119
Text-books, ... 35
Theology, preparation for,..... 102
Treasurer, ... 5
Trustees, board of,..... 5
executive committee of,..... 5
meetings of, ... 3, 4
Tuition, charges, ... 35
loans, ... 35
University, charter, ... 17
bulletins, ... 28
buildings and equipment,... 19
circulars, ... 28
endowment, ... 18
establishment, ... 17
Guild, ... 26
location, ... 18

	PAGE
University:	
object,	17
organization,	98
Studies,	28
Veterinary Science,	54
Wingate Hall,	19
Winter courses,	117
Woodwork,	85
Women, admission of,	39
Worship, public,	31, 109
Young Men's Christian Association,	27, 31
Zoology,	58

THE MAINE BULLETIN

VOL. X OCTOBER, 1907 NO. 2

CATALOG

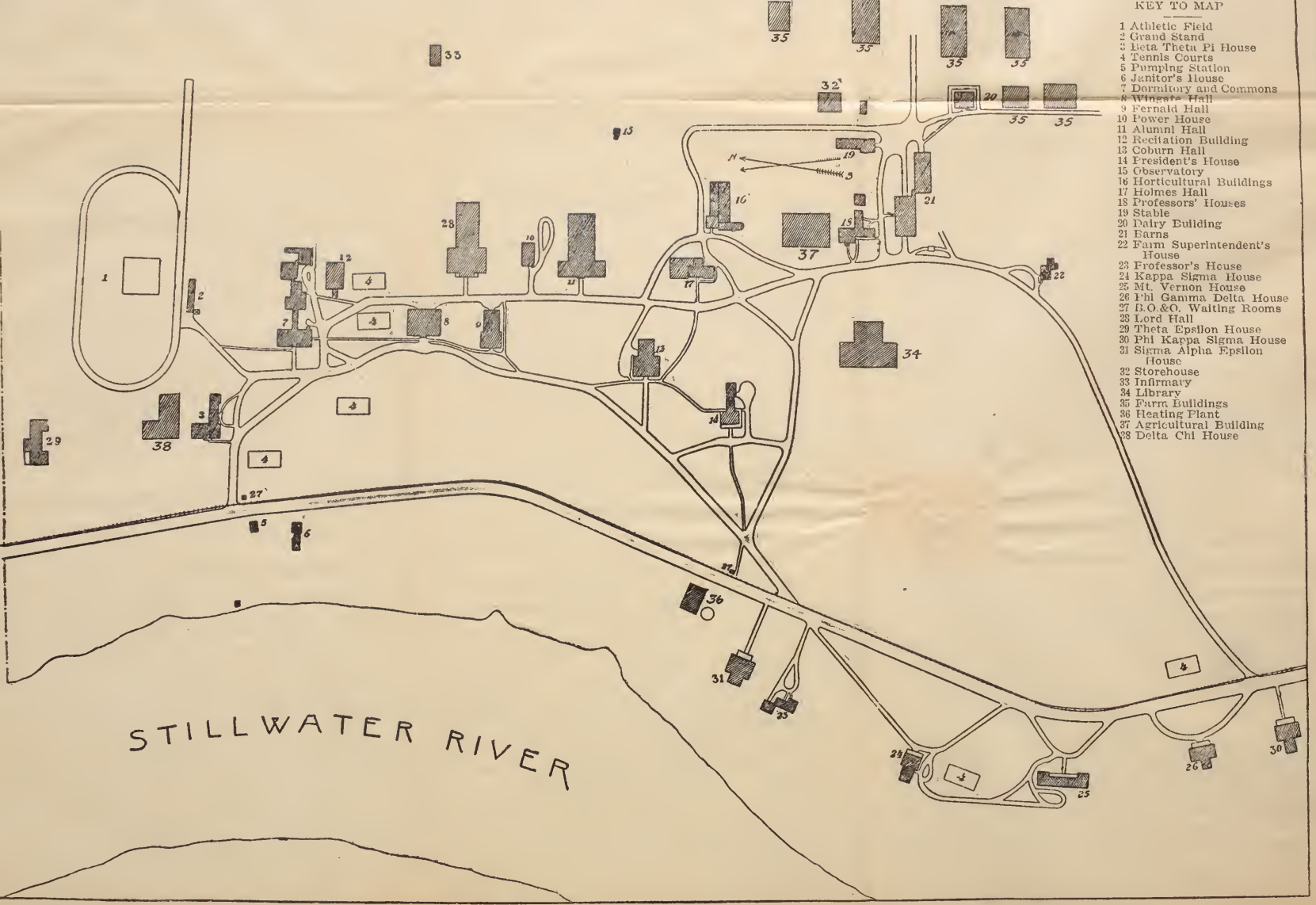
OF

THE UNIVERSITY OF MAINE

1907-1908

Published Monthly by the University

Entered at the Post Office at Orono, Maine, as second-class matter


KEY TO MAP
1 Athletic Field
2 Grand Stand
3 Beta Theta Pi House
4 Tennis Courts
5 Pumping Station
6 Janitor's House
7 Dormitory and Commons
8 Winters Hall
9 Fernald Hall
10 Power House
11 Alumni Hall
12 Recitation Building
13 Coburn Hall
14 President's House
15 Observatory
16 Horticultural Buildings
17 Holmes Hall
18 Professors' Houses
19 Stable
20 Dairy Building
21 Barns
22 Farm Superintendent's House
23 Professor's House
24 Kappa Sigma House
25 Mt. Vernon House
26 Phi Gamma Delta House
27 B.O.&O. Waiting Rooms
28 Lord Hall
29 Theta Epsilon House
30 Phi Kappa Sigma House
31 Sigma Alpha Epsilon House
32 Storehouse
33 Infirmary
34 Library
35 Farm Buildings
36 Heating Plant
37 Agricultural Building
38 Delta Chi House
STILLWATER RIVER

CATALOG OF THE

UNIVERSITY OF MAINE

1907-1908

ORONO, MAINE

AUGUSTA
KENNEBEC JOURNAL PRINT
1907

1907 1908 1908 1909

JULY

S	M	T	W	T	F	S
..	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	..	..	..

AUGUST

S	M	T	W	T	F	S
..	..	..	..	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

SEPTEMBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	..	..	..	..	..
..	..	..	..	..	..	..

OCTOBER

S	M	T	W	T	F	S
..	..	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	..	..

NOVEMBER

S	M	T	W	T	F	S
..	..	..	..	..	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
..	..	..	..	..	..	..

DECEMBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	..	..	..	..
..	..	..	..	..	..	..

JANUARY

S	M	T	W	T	F	S
..	..	..	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	..

FEBRUARY

S	M	T	W	T	F	S
..	..	..	..	..	..	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

MARCH

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	..	..	..	..
..	..	..	..	..	..	..

APRIL

S	M	T	W	T	F	S
..	..	..	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	..	..

MAY

S	M	T	W	T	F	S
..	..	..	..	..	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	..	..	..	..	..	..

JUNE

S	M	T	W	T	F	S
..	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	..	..	..	..
..	..	..	..	..	..	..

JULY

S	M	T	W	T	F	S
..	..	..	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	..

AUGUST

S	M	T	W	T	F	S
..	..	..	..	..	..	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	..	..	..	..	..

SEPTEMBER

S	M	T	W	T	F	S
..	..	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	..	..	..

OCTOBER

S	M	T	W	T	F	S
..	..	..	..	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

NOVEMBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	..	..	..	..	..
..	..	..	..	..	..	..

DECEMBER

S	M	T	W	T	F	S
..	..	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	..	..
..	..	..	..	..	..	..

JANUARY

S	M	T	W	T	F	S
..	..	..	..	..	..	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	..	..	..	..	..
..	..	..	..	..	..	..

FEBRUARY

S	M	T	W	T	F	S
..	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	..	..	..	..	..	..

MARCH

S	M	T	W	T	F	S
..	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	..	..	..

APRIL

S	M	T	W	T	F	S
..	..	..	..	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	..

MAY

S	M	T	W	T	F	S
..	..	..	..	..	..	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	..	..	..	..	..
..	..	..	..	..	..	..

JUNE

S	M	T	W	T	F	S
..	..	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	..	..	..
..	..	..	..	..	..	..

CALENDAR

FALL SEMESTER, 1907

September 16, Monday,	Arrearage examinations begin.
September 17, Tuesday,	Entrance examinations begin.
September 18, Wednesday,	Registration begins, 1.30 P. M.
September 19, Thursday,	Fall semester begins.
November 26, Tuesday,	Meeting of the Board of Trustees.
November 27, Wednesday,	Thanksgiving recess begins, 5.30 P.M.
December 2, Monday,	Thanksgiving recess ends, 12 M.
December 6, Friday,	Sophomore prize declamations.
December 22, Sunday,	Christmas recess begins, 5.30 P. M.
December 31, Tuesday,	Arrearage examinations begin (Spring semester studies).

1908

January 2, Thursday,	Christmas recess ends, 7.45 A. M.
January 31, Friday,	Fall semester ends.

SPRING SEMESTER, 1908

February 1, Saturday,	Registration.
February 3, Monday,	Spring semester begins.
February 22, Saturday,	Washington's birthday, a holiday.
March 30, Monday,	Spring recess begins, 7.45 A. M.
April 6, Monday,	Spring recess ends, 7.45 A. M.
April	Patriot's day, a holiday.
May 20, 12 M.-24,	Junior week.
May 30, Saturday,	Memorial day, a holiday.
June 4, Thursday,	Entrance examinations begin 8 A. M.
June 7, Sunday,	Baccalaureate address.
June 8, Monday,	Convocation.
June 8, Monday,	Class day.
June 8, Monday,	Reception by the President.
June 9, Tuesday,	Meeting of the Board of Trustees.
June 9, Tuesday,	Receptions by the fraternities.
June 9, Tuesday,	Alumni luncheon.
June 9, Tuesday,	Address before the Phi Kappa Phi Society.
June 10, Wednesday,	COMMENCEMENT.
June 10, Wednesday,	Commencement dinner.
June 10, Wednesday,	Meeting of the Alumni Association.
June 10, Wednesday,	Commencement concert.
June 29, Monday,	Summer term begins.
August 7, Friday,	Summer term ends.

FALL SEMESTER, 1908

September 14, Monday,	Arrearage examinations begin.
September 14, Monday,	Entrance examinations begin.
September 16, Wednesday,	Registration begins, 1.30 P. M.
September 17, Thursday,	Fall semester begins.
November 24, Tuesday,	Meeting of the Board of Trustees.
November 25, Wednesday,	Thanksgiving recess begins, 5.30 P. M.
November 30, Monday,	Thanksgiving recess ends, 12 M.
December 4, Friday,	Sophomore prize declamations.
December 22, Tuesday,	Christmas recess begins, 5.30 P. M.

1909

January 2, Saturday,	Christmas recess ends, 7.45 A. M.
January 29, Friday,	Fall semester ends.

SPRING SEMESTER, 1909

January 30, Saturday,	Registration.
February 1, Monday,	Spring semester begins.
June 9, Wednesday,	COMMENCEMENT.

CALENDAR OF THE COLLEGE OF LAW

1907

October 2, Wednesday, Fall term begins.
December 18, Wednesday, Fall term ends.

1908

January 8, Wednesday, Winter term begins.
March 18, Wednesday, Winter term ends.
March 25, Wednesday, Spring term begins.
June 10, Wednesday, COMMENCEMENT.
September 30, Wednesday, Fall term begins.
December 16, Wednesday, Fall term ends.

1909

January 6, Wednesday, Winter term begins.
March 17, Wednesday, Winter term ends.
March 24, Wednesday, Spring term begins.
June 9, Wednesday, COMMENCEMENT.

THE BOARD OF TRUSTEES

Hon. HENRY LORD, President	Bangor
Hon. EDWARD BRACKETT WINSLOW	Portland
Hon. JOHN ALFRED ROBERTS, M. A.	Norway
Hon. CHARLES LESTER JONES	Corinna
EDWIN JAMES HASKELL, B. S.	Westbrook
Hon. WILLIAM THOMAS HAINES, LL. B., LL. D.	Waterville
SAMUEL WADSWORTH GOULD, B. S., Clerk	Skowhegan
Hon. SUMNER PETER MILLS,	Stonington

EXECUTIVE COMMITTEE

Trustees LORD and WINSLOW

TREASURER

Hon. ISAIAH KIDDER STETSON, Ph. B. — Bangor

ADVISORY BOARD FOR THE COLLEGE OF LAW

Gen. CHARLES HAMLIN, M. A., President	Bangor
Hon. HENRY BRADSTREET CLEAVES	Portland
Justice ALBERT MOORE SPEAR	Gardiner
Hon. WILLIAM THOMAS HAINES, LL. D.	Waterville
Hon. HERBERT MILTON HEATH, M. A.	Augusta
Chief Justice LUCILIUS ALONZO EMERY, LL. D.	Ellsworth
Dean WILLIAM EMANUEL WALZ, M. A., LL. B., Secretary	Bangor

THE EXPERIMENT STATION COUNCIL

PRESIDENT GEORGE EMORY FELLOWS, PH. D., LL. D.	*President*
DIRECTOR CHARLES DAYTON WOODS, SC. D.	*Secretary*
JOHN ALFRED ROBERTS, M. A., Norway	*Committee of Board of Trustees*
CHARLES LESTER JONES, Corinna	
SAMUEL WADSWORTH GOULD, B. S., Skowhegan	
AUGUSTUS WM. GILMAN, Foxcroft	*Commissioner of Agriculture*
EUGENE HARVEY LIBBY, Auburn	*State Grange*
CHARLES S. POPE, Manchester	*State Pomological Society*
RUTILLUS ALDEN, Winthrop	*State Dairymen's Association*
JAMES MONROE BARTLETT, M. S.	*Members of the Station Staff*
LUCIUS HERBERT MERRILL, B. S.	
FREMONT LINCOLN RUSSELL, V. S.	
GILBERT MOTTIER GOWELL, M. S.	
EDITH MARION PATCH, B. S.	
WARNER JACKSON MORSE, M. S.	
RAYMOND PEARL, PH. D.	

ALUMNI ASSOCIATIONS

THE GENERAL ASSOCIATION

President, J. M. Oak, '73, Bangor
Secretary, F. L. Russell, '85, Orono
Corresponding Secretary, R. K. Jones, '86, Orono
Treasurer, A. H. Brown, '90, Oldtown
Necrologist, J. N. Hart, '85, Orono
Alumni Members of the Athletic Association, G. E. Thompson, '91 Orono, E. H. Kelley, '90, Bangor, A. L. Bird, '00, Rockland

The West Maine Association

President, A. C. Wescott, '99, 7 Exchange St., Portland
Secretary and Treasurer, S. E. Patrick, '03, Gorham

The North Maine Association

President, Harvey B. Thayer, '73, Presque Isle
Secretary, N. H. Martin, '76, Fort Fairfield

The Boston Association

President, W. N. Cargill, '00, 333 Union St., Lynn, Mass.
Vice-President, W. B. Pierce, '90, Boston, Mass.
Secretary, E. R. Berry, '04, 11 Clifside Ave., Swampscot, Mass.
Executive Committee, L. C. Southard, '75, E. O. Goodridge, '85, G. T. Stewart, '04

The New York Association

President, W. J. Hancock, '88, Brooklyn, N. Y.
Vice-President, Allen Rogers, '97, 764 De Kalb Ave., Brooklyn, N. Y.
Secretary and Treasurer, Ralph Hamlin, 399 Sixth Ave., Brooklyn, N. Y.
Assistant Secretary, C. E. Currier, '06, N. Y. City

The Washington (D. C.) Association

President, P. L. Ricker, '00, U. S. Dept. Ag.
Secretary and Treasurer, H. P. Gould, '93, U. S. Dept. Ag.

THE PENOBSCOT VALLEY ASSOCIATION

President, W. B. Peirce, '90, Bangor
Secretary and Treasurer, J. H. McClure, '05, Bangor
Executive Committee, V. K. Gould, '97, H. B. Buck, '93,
H. S. Boardman, '95

THE WESTERN ASSOCIATION

President, W. Webber, '84, 889 Sawyer Ave., Chicago
First Vice-President, G. W. Sturtevant, '81, 1208 Fisher Building, Chicago
Second Vice-President, A. D. Page, '86, Chicago
Secretary and Treasurer, H. W. Sewall, '02, 259 S. Clinton St., Chicago
Executive Committee, C. W. Rogers, '76, C. C. Whittier, '99, F. M. Davis, '01, M. C. Wiley, '03, A. J. Butterworth, '06

THE PITTSBURG ASSOCIATION

President, W. T. Brastow, '97, Ambridge, Pa.
Vice-President, B. F. Faunce, Pittsburg, Pa.
Secretary and Treasurer, H. E. Cole, '02, 1023 Park Building, Pittsburg, Pa.
Executive Committee, J. W. Brown, '99, Chairman, Williamsburg, Pa.

THE SCHENECTADY ASSOCIATION

President, J. G. Lurvey, '00, 1206 State St.
Vice-President, C. N. Rackliffe, '02, 1206 State St.
Secretary, H. E. Duren, '02, 306 Lafayette St.
Treasurer, H. F. Hoxie, '99, 940 State St.
Executive Committee, C. W. Bartlett, '01, H. P. Mayo, '99,
H. E. Duren, '02

THE KENNEBEC VALLEY ASSOCIATION

President, J. H. Burleigh, '87, Waterville
Secretary, E. C. Butler, '01, Skowhegan
Treasurer, H. E. Cook, '00, Waterville
Executive Committee, J. H. Burleigh, '87, E. C. Butler, '01,
H. E. Cook, '00
Legislative Committee, W. R. Pattengall, '97, E. F. Danforth, '92,
J. E. Nelson, '04

OFFICERS OF ADMINISTRATION

GEORGE EMORY FELLOWS, President
JAMES NORRIS HART, Dean of the University
JAMES STACY STEVENS, Dean of the College of Arts and Sciences
CHARLES DAYTON WOODS, Director of the Experiment Station
WILLIAM EMANUEL WALZ, Dean of the College of Law
GILMAN ARTHUR DREW, Director of the Museum
WILLIAM DANIEL HURD, Dean of the College of Agriculture
ELIZABETH ABBOTT BALENTINE, Secretary of the Faculty

*THE FACULTY OF INSTRUCTION AND INVESTIGATION

GEORGE EMORY FELLOWS, Ph. D., L. H. D., LL. D. — Campus
President

Professor of History

MERRITT CALDWELL FERNALD, Ph. D., LL. D. — 54 Main Street
Professor of Philosophy

ALFRED BELLAMY AUBERT, M. S. — 53 Main Street
Professor of Chemistry

† ALLEN ELLINGTON ROGERS, M. A. — 47 Main Street
Professor of Civics and Constitutional Law

JAMES MONROE BARTLETT, M. S. — College Street
Chemist in the Experiment Station

LUCIUS HERBERT MERRILL, B. S. — 14 Bennoch Street
Professor of Biological and Agricultural Chemistry, and Chemist in the Experiment Station

JAMES NORRIS HART, C. E., M. S. — College Street
Professor of Mathematics and Astronomy
Dean of the University

FREMONT LINCOLN RUSSELL, B. S., V. S. — 70 North Main Street
Professor of Biology, and Veterinarian in the Experiment Station

* Arranged in groups in order of seniority of appointment.
† Absent on leave.

HORACE MELVYN ESTABROOKE, M. A. 80 Main Street
Professor of English
JAMES STACY STEVENS, M. S., LL. D. 99 Main Street
Professor of Physics
Dean of the College of Arts and Sciences
GILBERT MOTTIER GOWELL, M. S. Campus
In charge of Poultry Experiments in the Experiment Station
CHARLES DAYTON WOODS, Sc. D. 55 Main Street
Director of the Experiment Station
JOHN HOMER HUDDILSTON, Ph. D. 105 Main Street
Professor of Greek
WILLIAM EMANUEL WALZ, M. A., LL. B. 183 Cedar St., Bangor
Professor of Law
Dean of the College of Law
GILMAN ARTHUR DREW, Ph. D. College Street
Professor of Biology
Director of the Museum
WILBUR FISK JACKMAN, B. S., Ph. C. 38 Pine Street
Professor of Pharmacy
RALPH KNEELAND JONES, B. S. 26 Bennoch Street
Librarian
WILLIAM DANIEL HURD, B. S. Campus
Professor of Agronomy
Dean of the College of Agriculture
JACOB BERNARD SEGALL, Ph. D., 61 Mill Street
Professor of Romance Languages
HAROLD SHERBURNE BOARDMAN, C. E. 76 Main Street
Professor of Civil Engineering
GEORGE DAVIS CHASE, Ph. D. 59 Main Street
Professor of Latin
GORDON EDWIN TOWER, B. S., M. F. Forest Avenue
Professor of Forestry
CAROLINE COLVIN, Ph. D. Campus
Professor of History
ARTHUR CRAWFORD JEWETT, B. S. 90 Main Street
Professor of Mechanical Engineering
WALTER KIERSTEAD GANONG, B. Sc. 53 Main Street
Professor of Electrical Engineering
CHARLES DAVIDSON, Ph. D. College Street
Professor of Education
JOSEPH WILLIAM CARR, Ph. D. 100 Main Street
Professor of Germanic Languages

WARNER JACKSON MORSE, M. S. 76 North Main Street
Vegetable Pathologist in the Experiment Station
ROBERT JAMES SPRAGUE, PH. D. 7 Eaton Place, Bangor
Professor of Economics and Sociology
WALTER STEVENS BROWN, Captain 25th U. S. Infantry Campus
Professor of Military Science and Tactics
EDITH MARION PATCH, B. S. College Street
Entomologist in the Experiment Station
CHARLES PARTRIDGE WESTON, C. E., M. A. College Street
Professor of Mechanics and Drawing
RAYMOND PEARL, PH. D. 7 Main Street
Biologist in the Experiment Station
PERCY ANDERSON CAMPBELL, M. S. A. Forest Avenue
Professor of Animal Industry
FRANK MACY SURFACE, PH. D. Peters Street
Associate Biologist in the Experiment Station
MINTIN ASBURY CHRYSLER, PH. D. 78 North Main Street
Associate Professor of Botany
EDGAR MYRICK SIMPSON, B. A. 31 Highland Avenue, Bangor
Assistant Professor of Law
*GUY ANDREW THOMPSON, M. A. College Street
Assistant Professor of English
GEORGE RUFUS WHEELER, M. A. 78 North Main Street
Acting Assistant Professor of English
HERMAN HERBERT HANSON, M. S. Forest Avenue
Assistant Chemist in the Experiment Station
CHARLES BARTO BROWN, C. E. 5 Forest Avenue
Assistant Professor of Civil Engineering
ANDREW PAUL RAGGIO, PH. D 28 Bennoch Street
Assistant Professor of Romance Languages
HERMAN BECKENSTRATER, M. S. Campus
Assistant Professor of Horticulture
JAMES EDGAR McCLINTOCK, B. S. 40 Main Street
In Charge of Agricultural Extension Work
WALTER MOLBRAY CURTIS, S. B. College Street
Assistant Professor of Mechanical Engineering
HARLEY RICHARD WILLARD, M. A. 40 Main Street
Assistant Professor of Mathematics
EARNEST DAVID WAID, B. Sc. 57 Main Street
Assistant Professor of Agronomy

* Absent on leave.

LINCOLN WARE RIDDLE, PH. D. College Street
Instructor in Botany (Summer Term)
FRANK FLETCHER STEPHENS, PH. D. 78 North Main Street
Instructor in History (Summer Term)
LAURIE LORENZO BURGESS, M. S. Campus
Instructor in Chemistry (Summer Term)
ARCHER LEWIS GROVER, B. S. 14 Mill Street
Instructor in Civil Engineering and Drawing
BERTRAM LEIGH FLETCHER, LL. B. 28 Second Street, Bangor
Instructor in Agency
GEORGE HENRY WORSTER, LL. B. 234 Center Street, Bangor
Instructor in Insurance
BARTLETT BROOKS, B. A., LL. B. 10 Columbia Building, Bangor
Instructor in Contracts
EVERETT WILLARD DAVEE Mill Street
Instructor in Wood and Iron Work
WALTER EVERETT PRINCE, M. A. 26 Main Street
Instructor in English
PERCY LORING REYNOLDS, M. D. 30 Main Street
Physical Director and University Physician
ELMER EARL MOOTS, B. C. E. Stillwater
Instructor in Mathematics
WINDSOR PRATT DAGGETT, PH. B. Middle Street
Instructor in Public Speaking
CHARLES JENKINS CARTER 6 Pine Street
Instructor in the Machine Shop
GUSTAV FREDERICK WITTIG, B. S., E. E. 78 North Main Street
Instructor in Electrical Engineering
ARTHUR CRAIG WHITTIER, B. S. College Street
Assistant Chemist in the Experiment Station
JOANNA CARVER COLCORD, B. S. College Street
Assistant Chemist in the Experiment Station
HENRY WALTER BEARCE, B. S. College Street
Instructor in Physics
DAYTON JAMES EDWARDS, B. S. 88 Main Street
Instructor in Biology
PAUL LEONARD BEAN, B. S. 28 North Main Street
Instructor in Civil Engineering
ROBERT EDMUND CLAYTON, B. S. 105 Forest Avenue, Bangor
Instructor in Chemistry
GLADYS ETHEL FELLOWS, B. A. Campus
Instructor in Romance Languages

LESLIE IRVING JOHNSTON, B. S. — Milford
Instructor in Civil Engineering

JAMES SEYMOUR, PH. G., B. S. — College Street
Instructor in Chemistry

HENRY LEWIS SWEET, B. A. — College Street
Instructor in Mathematics

WILLIS FLYE WASHBURN, B. S. — 19 Mill Street
Instructor in Chemistry

CHARLES SYLVESTER RIDGWAY, B. S. — 78 North Main Street
Instructor in Botany

LOWELL JACOB REED, B. S. — Campus
Instructor in Mathematics and Physics

GEORGE EDWARD PEARSON, M. A. — Pond Street
Instructor in English

ARTHUR RUSSELL LORD, B. S. — Campus
Tutor in Civil Engineering

CARLETON CHASE MURDOCK, B. A. — 61 Main Street
Tutor in Physics

CHARLES HENRY SAMPSON, B. S. — Campus
Tutor in Drawing

FOREST JOHN MARTIN, LL. B. — 105 Cumberland Street, Bangor
Resident Lecturer on Common Law Pleading and Maine Practice

HUGO CLARK, C. E. — 5 Broadway, Bangor
Resident Lecturer on Equity Pleading and Practice

CHARLES HAMLIN, M. A. — 25 Fifth Street, Bangor
Lecturer on Bankruptcy and Federal Procedure

LUCILIUS ALONZO EMERY, M. A., LL. D. — Ellsworth
Lecturer on Roman Law and Probate Law

LOUIS CARVER SOUTHARD, M. S., LL. D. — Boston
Lecturer on Medico-Legal Relations

ASSISTANTS AND OTHER OFFICERS

STEPHEN JOHN FARRELL — Forest Avenue
Assistant in Physical Training

MAUDE BROWN COLCORD — College Street
Assistant in the Library

ISABEL MONRO, B. S. — 1 Forest Avenue
Cataloger in the Library

BERTHA COREY WHITTEMORE — 1 Forest Avenue
Assistant in the Library

REX CARLETON GELLERSON, B. S. — Campus
Inspector in the Experiment Station

CYRUS SKILLINGS WINCH — 12 Mill Street
Taxidermist in the Museum

MICHAEL H. DEMPSEY — Campus
Herdsman on the Farm

ANDREW MAYHEW SHAW — Park Street
Superintendent of Grounds and Greenhouses

FRANK MORRISON — Campus
Foreman of the Farm

HALSEY RICHARDSON WING — Campus
Head Janitor

GEORGE ABRAHAM COLBURN — Bennoch Street
Head Carpenter

GRACE MARY COLBURN — Bennoch Street
Cashier

OLA HELEN PERRIN — College Street
Stenographer to the President

ANNIE MARIE SNOW — 58 Main Street
Clerk and Stenographer to the Director of the Experiment Station

VIVIAN AUGUSTA PAGE, — 21 Pine Street
Stenographer to the Deans and the Secretary

BLANCHE FOLSOM POOLER — Stillwater Street
Stenographer in the Experiment Station

NELLIE WILKINS LANE — Campus
Matron of the Mt. Vernon House

HENRY ATLEIGH MILLET — Campus
Meteorological Observer in the Experiment Station

WALTER ANDERSON — Campus
Poultry man in the Experiment Station

ROYDEN LINDSAY HAMMOND — 59 Main Street
Seed Analyst and Photographer in the Experiment Station

FRANK DELMONT STERRY — Campus
Laboratory Assistant in the Experiment Station

*STANDING COMMITTEES OF THE FACULTY

Admission to College

The President, the Deans (sub-committee), Professor Aubert, Professor Carr, Professor Chase, Professor Chrysler, Professor Colvin, Professor Drew, Professor Estabrooke, Professor Huddilston, Professor Segall

Advanced Degrees

Professor Fernald, Professor Chase, Professor Colvin, Professor Estabrooke, Professor Walz, Professor Weston

Approved Tutors

Professor Hart, Secretary Balentine

Athletics

Professor Jones, Professor Boardman, Doctor Reynolds

Bachelor's Degree

Professor Stevens, Professor Colvin, Professor Hurd, Professor Weston

Bulletins

Professor Jones, Professor Merrill, Professor Wheeler

Catalog

Professor Stevens

Courses

Professor Hart, Professor Boardman, Professor Drew, Professor Stevens

Debate

Professor Estabrooke, Professor Colvin, Mr. Daggett, Professor Sprague

Delinquent Students

Professor Boardman, Mr. Daggett, Professor Ganong, Mr. Grover, Professor Willard

Entrance Examinations

Professor Stevens

---

*The member whose name is printed first is the chairman of the committee.

Fitting Schools

Professor Estabrooke, Professor Carr, Professor Chase, Professor Davidson, Professor Hart (Secretary), Professor Huddilston, Professor Stevens

Health

Doctor Reynolds, Professor Colvin, Professor Jackman, Professor Russell

Honors

Professor Stevens, Professor Carr, Professor Huddilston

Lectures

Professor Chase, Professor Segall, Professor Sprague

Library

Professor Jones, Professor Colvin, Professor Estabrooke, Professor Jackman

Military Work

Captain Brown, Professor Jewett, Director Woods

Press

Professor Jones, Professor Carr, Professor Wheeler

Registration

Professor Stevens, Professor Drew, Professor Hart

Rules

Professor Hart, Professor Stevens, Director Woods

Summer Term

Professor Stevens

Student Advisers

For freshmen in all courses: Professor Hart

For all other students: the heads of the departments in which their major subjects are taken

Student Organizations Other Than Athletics

Professor Jones, Mr. Daggett, Professor Tower

Tuition Loans

President Fellows, Professor Estabrooke, Professor Fernald

The University Council

Faculty Members: President Fellows, Professor Boardman, Professor Hart, Professor Stevens

Seniors: Mr. Chase, Mr. Hanscom, Mr. Jacobs

Juniors: Mr. Higgins, Mr. Knight

THE UNIVERSITY OF MAINE

ESTABLISHMENT

By an act of Congress, approved July 2, 1862, it was provided that there should be granted to the states, from the public lands, "thirty thousand acres for each Senator and Representative in Congress," from the sale of which there should be established a perpetual fund, "the interest of which shall be inviolably appropriated by each state which may take and claim the benefit of this act, to the endowment, support, and maintenance of at least one college where *the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such manner as the legislatures of the states may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life.*" The act forbade the use of any portion of the principal or interest of this fund for the purchase, erection, or maintenance of buildings and required each state taking the benefit of the provisions of the act "to provide within five years not less than one college" to carry out the purposes of the act.

Maine accepted this grant in 1863, and in 1865 constituted "a body politic and corporate, by the name of the Trustees of the State College of Agriculture and the Mechanic Arts." The trustees were authorized to receive and hold donations, to select the professors and other officers of the college, to establish the conditions for admission, to lay out courses of study, to grant degrees, and to exercise other usual powers and privileges.

The Governor and Council were given the right "to examine into the affairs of the college, and the doings of the trustees, and to inspect all their records and accounts, and the buildings and premises occupied by the college."

It was provided that in addition to the studies especially required by the Act of Congress, the college should teach such other studies as its facilities would permit.

The Legislature of 1897 changed the name of the institution to "The University of Maine."

THE UNIVERSITY OF MAINE

ENDOWMENT AND INCOME

The State of Maine received, under the Act of Congress above referred to, two hundred and ten thousand acres of public land, from which the University has realized an endowment fund of $118,300. This has been increased by a bequest of $100,000 from Abner Coburn of Skowhegan, who was for many years President of the Board of Trustees. The town of Orono contributed $8,000, and the town of Oldtown $3,000, for the purchase of the site on which the buildings stand. The State has appropriated about $350,000 for the material equipment. The present value of the buildings and equipment belonging to the University, including gifts other than those made by the State, is estimated at $750,000.

Under an Act of Congress approved March 2, 1887, the University receives $15,000 annually for the maintenance of the department known as the Agricultural Experiment Station.

Under an Act of Congress approved August 30, 1890, the University receives $25,000 annually for its more complete endowment and maintenance.

Under an Act of Congress, approved March 17, 1906, the University receives an appropriation of $5,000 a year for work in the Agricultural Experiment Station. This appropriation will increase by $2,000 a year until it reaches $15,000.

By an amendment to the agricultural appropriation bill, approved March 4, 1907, the University receives $5,000 in 1897, and an addition of a like amount each year until the sum reaches $25,000.

Under an act of the Legislature, approved March 26, 1907, the University receives $65,000 a year for each of the years 1907 and 1908 for maintenance.

Student fees and miscellaneous receipts complete the income.

LOCATION

The University has a beautiful and healthful location in the town of Orono, Penobscot county, half way between the villages of Orono and Stillwater, three miles from the city of Oldtown, and nine miles from the city of Bangor. The Stillwater river, an arm of the Penobscot, flows in front of the buildings, forming the western boundary of the campus. Orono is upon the Maine Central Railroad and is easy of access from all parts of the state.

The Bangor Railway and Electric Company railroad runs through the University grounds. Visitors may find it convenient to take the electric cars at Bangor, Veazie, or Oldtown, as the electric road does not run to the railroad station at Orono. Baggage may be sent to Orono by the Maine Central Railroad.

The College of Law is located in the Exchange Building, Bangor, at the corner of Exchange and State streets.

THE BUILDINGS AND THEIR EQUIPMENT

Oak Hall.—In the northern part of the campus is Oak Hall, a substantial four-story brick building used as a dormitory for men, named in honor of Lyndon Oak, of Garland, for many years a useful member of the board of trustees. It contains forty-nine rooms for students, and is furnished with bath rooms. It is heated by steam, supplied with water, and lighted by electricity.

Fernald Hall.—This building, named in honor of Merritt C. Fernald, LL. D., President of the University from 1879 to 1893, is a two-story brick building. It contains fifteen rooms devoted to the departments of chemistry and pharmacy. On the first floor are the quantitative and pharmaceutical laboratories, with offices and private laboratories for the professors of chemistry and pharmacy; upon the second floor are lecture rooms, the qualitative laboratory, the office and private laboratory of the instructor in qualitative analysis, a store room, and a recitation room. Under the roof are arranged the mineralogical laboratory, dark rooms, and a laboratory for freshman work. In the basement are an assay laboratory, a laboratory for water analysis, a room for organic preparations, and store rooms.

Coburn Hall.—Directly south of Fernald Hall is Coburn Hall, named in honor of Abner Coburn of Skowhegan, the chief benefactor of the University. It is a brick building, three stories in height. In the basement and on the first floor are located the University Exchange, four recitation rooms, and part of the museum. On the second floor are the botanical and zoölogical laboratories, recitation rooms for the departments of biology, English, and modern languages, and the remainder of the museum. On the third floor are recitation rooms for the departments of economics, philosophy, and modern languages, the modern language seminary room, and the psychological laboratory.

Wingate Hall.—One of the most conspicuous buildings on the campus, Wingate Hall, named in honor of William P. Wingate of Bangor, long an honored member of the board of trustees, is a three-story brick structure, rectangular in form, with a handsome clock tower.

It was erected for the departments of civil and mechanical engineering, but is at present occupied chiefly by the departments of civil engineering, physics, and mechanics and drawing. On the ground floor are four recitation rooms, instrument rooms, an optical room, and the offices of the professors of civil engineering and mechanics and drawing. On the second floor are the offices and recitation rooms of the professors of physics, Greek, and Latin, two physical laboratories, and the physical apparatus rooms. On the third floor are two large, well lighted drawing rooms for the use of the departments of civil engineering and mechanics and drawing, and a filing room containing a collection of blue prints belonging to the department of civil engineering. In the basement are the electrical laboratory and the photometer room of the department of physics, and the cement testing laboratory. On the fourth floor is another photometer room for the use of students in physics.

Alumni Hall.—To the northeast of Coburn Hall stands Alumni Hall, erected in 1900. The front part contains on the ground floor the offices of the President, Secretary, and Cashier, a board room; two recitation rooms for the use of the military and mathematical departments, and the office of the Dean of the University; the second floor contains the university chapel with a large pipe organ in the choir gallery, and the drill hall with a running track in the gallery. In the basement under the drill hall are the offices of the military instructor and the physical director, the baseball cage, lockers, lavatories, rooms for storage, etc. The dimensions of the drill hall and gymnasium are 100 by 62 feet. This room is encircled by a 9-foot running track suspended from the roof. As a gymnasium it is equipped with complete apparatus of the most approved kind.

The Observatory.—The astronomical observatory stands upon a slight elevation to the east of Coburn Hall. The equatorial room is equipped with an eight-inch refractor of the best modern construction, with finding circles, driving-clock, filar micrometer, and other accessories. In the transit-room is a Repsold vertical circle of two-inch aperture. These instruments, together with sextants, sidereal chronometer, etc., furnish excellent facilities for instruction in both descriptive and practical astronomy.

Lord Hall.—This building, named in honor of President Henry Lord, of the Board of Trustees, is designed for the departments of mechanical and electrical engineering. It consists of a main part 82 x 56 feet in area and two stories in height, and an ell 125 x 42 feet partly

of two stories and partly of one story. It contains three recitation rooms, a large drawing room, the shops, suitable laboratories, and offices for the professors and instructors in the two departments concerned. The mechanical laboratory contains a Riehle testing machine of 60,000 pounds capacity; an oil testing machine manufactured by Tinius, Olsen & Co., of Philadelphia, and other oil testing apparatus; belt testing apparatus, steam separators, calorimeters, and injectors. The hydraulic laboratory in the basement contains steam pumps for testing, a pressure tank, and other apparatus for experimenting in the flow of water in pipes, weir measurements, etc. The forge room is newly equipped with down draft forges, manufactured by the B. F. Sturtevant Co., of Boston. The dynamo laboratory is provided with six direct-current dynamos, two alternating-current dynamos, a rotary converter, transformer, ammeters, voltmeters, wattmeters, rheostats, switches, etc., affording accommodations for fifteen students in a section. In the third story are located some of the recitation rooms and offices used by the department of agriculture and the agricultural extension work.

Holmes Hall.—This is a two-story brick building, 81 x 48 feet, standing south of Alumni Hall. It is occupied by the Maine Agricultural Experiment Station and is arranged as follows:

On the ground floor are five large chemical laboratories used in the analysis of foods, feeding stuffs, and fertilizers; the laboratory for vegetable pathology; and the biological laboratory. The general office and mailing room, the director's office, the laboratory for seed testing and photography, the entomological laboratory, and the library are on the second floor.

In the basement are rooms for the boiler, for the gas machine, for the grinding and preparation of samples, for the calorimeter, a kitchen used in the experiments upon the food of man, culture and preparation rooms used by the vegetable pathologist, and rooms for the storage of fuel, chemicals, and glass ware. The large attic is used for the storage of samples and supplies. With the exception of the thermometers and rain gauge, the meteorological apparatus is in this building. The building is heated by steam, supplied with gas and electricity, and is thoroughly equipped with apparatus for the work of agricultural investigation.

Library.—The library, completed in 1906, is the most attractive building on the campus. For its erection and furnishing the sum of $55,000 was given, without conditions, by Mr. Andrew Carnegie. The exterior is of Hallowell granite, furnished by the Hallowell Granite Works at a price far below the market rate. The stacks were erected by A. D.

Houghton, class of 1887, at a price considerably less than that of the regular stack manufacturers.

The building is two stories above a basement which is almost entirely above the ground level. The stacks are in the rear of the main building, and have a capacity of 75,000 volumes, with a cataloging room on the first floor, opening from the librarian's office. The first floor of the main building contains an entrance hall, open to the dome; on one side is a periodical room in the rear of which is a room for reserved books, and on the other is a reference room from which the librarian's office leads; there is a women's room on this floor. The second floor has a gallery surrounding a central open space, and on its walls, and in the entrance hall below, are the interesting collections of the University Guild; on the second floor also are a lecture hall, with a seating capacity of over one hundred and twenty-five, and five seminar rooms. The basement contains a newspaper room, a club room in which meetings of the various student organizations may be held, janitor's room, store room, and men's room.

The library is heated by steam and lighted by electricity, and is thoroughly ventilated. Each floor of the stacks and each seminar room is connected by an intercommunicating telephone system with the librarian's office, the assistant's desk, and the janitor's room, and the librarian's office has telephone connection with the University branch exchange rian's office has telephone connection with the University branch exchange.

The Power House.—A wooden building, 30 x 56 feet, just north of Alumni Hall, contains two boilers, of one hundred and fifty, and one hundred horse power, respectively, a fifty horse power Corliss engine, a fifteen horse power Otto gasoline engine, and the dynamos, which comprise the lighting plant. Students in the electrical engineering course receive instruction in the care and running of this equipment.

The Horticultural Building.—The greenhouses, offices, and laboratories for horticultural work lie just east of Holmes Hall. The greenhouses cover about 4000 square feet of surface, are heated with hot water, and furnish ample opportunity for the demonstration of the practical culture of flowers and vegetables under glass. In this building is an herbarium of economic plants, which is of increasing interest and value.

The Dairy Building.—The Dairy Building, 50 x 42 feet, contains a milk room, a butter room, a cheese room, a cold storage room, a cheese curing room, a lecture room, the office of the professor of animal indus-

try, and a laboratory. It is supplied with all necessary appliances for teaching the most approved methods of handling milk, cream, butter, and cheese. The building is heated by steam and supplied with hot and cold water. Power is furnished by a six horse power engine.

Central Heating Plant.—The new central heating station is located across the car tracks from the University buildings, just above the Sigma Alpha Epsilon house, and on ground low enough so that practically all the buildings to be connected will drain by gravity to the plant, thus saving pumping or lifting of the returns.

The station is a plain red brick structure, without any attempt at ornamentation, but of good proportions, and large enough to provide room for present needs and allow for considerable future extensions.

The pump pit is 8 x 17½ feet, the engine room 17½ x 40 feet, the boiler room 40 x 42 feet, and the proposed coal pocket 32 x 42 feet.

The chimney is 100 feet high, and 60 inches in diameter. It is of radial brick construction and stands on a solid ledge. The station equipment consists of three 72-inch boilers, 17 feet 6 inches long, with 16 feet tubes. They are of butt joint construction, with double cover strips, and capable of running 150 lbs. pressure if necessary. In connection with the boiler plant there are two 6 feet by 4 feet by 6 inches boiler feed pumps, with receiving tank, for handling the return water of condensation as it comes back from the buildings, and putting it into the boilers. All necessary provisions have been made for the future installation of engines and generators to furnish light and power for the University when practicable.

The Agricultural Building.—The new agricultural building, now in process of construction, will be ready for occupancy in September, 1908. The last legislature made an appropriation of $50,000 for the erection of this building. It will be 63 x 100 feet, built in Tudor style of architecture, of red brick, granite, and slate. The building will furnish offices, class rooms, and laboratories for the departments of agronomy, animal industry, horticulture, veterinary science, bacteriology, forestry, agriculture, biological chemistry, and agricultural extension work.

The Farm Buildings.—The lower barn, 100 x 50 feet, contains a modern tie-up with 26 stalls, two grain rooms, two bull rooms, nursery, calf room, and silo, and has storage capacity for 150 tons of hay and 100 tons of silage. The upper barn, 100 x 40 feet, contains a class room for instruction in stock judging, stalls and pens for digestion experiments,

rooms for grain and storage, scales for weighing animals, an electric motor for power, and a mill for grinding. The barns are lighted by electricity and supplied with water and steam. The basements of the barns contain storage rooms for manure and roots, and pens for swine. The sheep barn, 125 x 20 feet, is of special design and contains six large pens, a nursery, and a storage room. The poultry plant consists of an incubator house, 31 x 31 feet, a warmed breeding house 150 x 15 feet, two curtain front houses, 150 x 14 feet, and 120 x 16 feet, and a food house and laboratory 30 x 39 feet. These houses accommodate 1,000 mature birds. There are also detached brooder houses capable of caring for 2,500 chicks. Two tool houses furnish about 10,000 square feet of floor room for the storage of wagons and farm machinery.

Directly east of the new agricultural building is to be erected the coming year an octagonal stock judging pavilion 50 feet in diameter. The interior is to be fitted with seats in amphitheatre style, and may be used for large University gatherings.

A modern up-to-date piggery, 28 x 40 feet in size, has been erected. It contains eight pens, together with grain and feed cooking rooms.

A ten-room farm cottage to be occupied by the men employed in the different departments comprising the College of Agriculture has also been erected this year.

The Mt. Vernon House.—This is a wooden building, completed in 1898, which provides dormitory accommodations for women. It is situated near the recitation and laboratory buildings, upon a site overlooking the campus and commanding a beautiful view of the river, villages, and mountains. It is two stories in height, built in the colonial style, and consists of a long central portion and two wings. It contains a parlor, dining-room, kitchen, bathroom, and sixteen study rooms, each intended for two students. The rooms are large, well lighted, heated by a combined system of hot air and hot water, and provided with electric lights. A special feature is the long hall on each floor, extending sixty-six feet upon the front of the building, and wide enough to serve as an assembly or study room. The building, and the students who live in it, are under the supervision of a matron.

The Fraternity Houses.—Nine of the student fraternities occupy club houses, and two more are in process of erection. Six of the houses are on the campus, and two in the village of Orono. They are large, well arranged houses, affording rooms for about twenty-five students each. Several of the fraternities maintain their own boarding establishments.

The Infirmary.—A small wooden building has recently been erected on the back campus, to be used in caring for any cases of infectious disease that might appear among the students. It contains a ward for women, as well as one for men, with sanitary, comfortable, and convenient equipment for patients.

Other Buildings.—In addition to the buildings already described, there are several others devoted to various purposes. Among these are the President's house, the Commons or general boarding house, and three residences occupied by members of the faculty.

The Athletic Field.—Alumni Field, so called because funds required for its construction were contributed by the Alumni Association, is located at the northwestern extremity of the campus, about 1,200 feet from the Gymnasium. It contains a quarter-mile cinder track, with a 220-yard straightaway, and is graded and laid out for football, baseball, and field athletics.

THE LIBRARY

The library contains thirty-four thousand bound volumes and eight thousand pamphlets. Some two thousand volumes of especial interest to the Experiment Station are kept in the Station building, and nearly three thousand law books are shelved in the rooms of the College of Law. Reference libraries are maintained in departmental rooms by those departments which require them.

More than half the volumes in the library have been added within the last few years. Accessions average about 2,500 annually, and the greater part of these are acquired by purchase. In large part purchases are made of books selected by heads of departments, and this method results in a collection of great working value.

The library is classified according to the Dewey system, slightly modified; there is a card catalog arranged by authors and subjects; access to the shelves is entirely unrestricted. Students may borrow three volumes at a time, to be retained three weeks, when they may be renewed, unless previously called for; special permission to borrow a larger number may be obtained, when necessary, upon application to the librarian. There is a fine of two cents a day for books kept overtime. Officers and alumni of the University may borrow any reasonable number of volumes without time limit, except that all books must be returned at least nine days before Commencement, and the return of any volume may be required at any time by the library committee. Other responsible per-

sons may obtain the privileges of the library upon application to the Librarian. The Librarian and his assistants are glad to give advice and help at any time.

During the fall semester of each year, a series of three lectures is given by the Librarian upon the following subjects: The Library and Its Use, Classification and the Catalog, and Reference Books and Their Use. Attendance upon these is required of freshmen and others in their first year at the University, with the purpose of giving them some idea of the opportunities the library offers and suggestions that will aid them in its use.

The Librarian also offers an elective course in the spring semester on bibliography,—the development of books and libraries, and the principles of library administration. This course consists of lectures, with collateral reference work, one hour a week, and may count for credit towards graduation.

The library is a designated depository for the publications of the United States Congress, and also receives publications of different departments not included in the depository set. All the publications of the State of Maine are received. Through the courtesy of the late Hon. L. D. Carver, State Librarian, public documents of a number of other states are received, in accordance with a series of exchanges arranged by him.

Over three hundred and fifty of the most important literary, scientific, and technical periodicals, both American and foreign, are regularly received. The leading papers of Maine, together with a selected list of daily papers published in the large cities, are on file.

The library is open daily from 8.00 A. M to 12.00 M., and from 1.30 to 5.30, and from 7.00 to 9.30 P. M., Sundays and legal holidays excepted. On Sunday it is open from 2.30 to 5.30 P. M. During the vacations it is open from 9.00 A. M. to 12.00 M. and from 2.00 P. M. to 5.00 P. M. each week day, except Saturday, when it is open in the forenoon only.

THE MUSEUM OF NATURAL HISTORY

GILMAN ARTHUR DREW, Director
Curator of the Zoölogical Collections
LUCIUS HERBERT MERRILL
Curator of the Geological Collections
MINTIN ASBURY CHRYSLER
Curator of the Botanical Collections
CYRUS SKILLINGS WINCH
Taxidermist and Assistant Curator of the Zoölogical Collection

The museum is located in the wing of Coburn Hall and in an adjoining room in the main part of the building.

A taxidermist devotes his entire time to the museum, and contributors may be assured that their donations will be properly cared for. Valuable specimens that could be saved for the museum with little expense of time or money are frequently allowed to go to waste. While the museum is not in a position to pay for specimens it will gladly arrange for their transportation, and the name of the donor will be placed on the specimen label. The locality and date of collection should accompany each specimen, as well as the name of the donor and such other information as might prove valuable.

Geological Collections.—These collections occupy the upper floor of the wing of Coburn Hall where arrangements are being made to give them proper display. The collections include a general collection of the more important fragmental, crystalline, and volcanic rocks; a collection of building stones; a series designed to illustrate the rocks of the State; a general collection of the more common minerals; a collection of economic minerals furnished by the U. S. National Museum; an educational series of rocks furnished by the U. S. Geological Survey; and a small collection of plant and animal fossils.

The collections illustrating the mineral resources of the State may be made of great value, both from the scientific and economic standpoint, and especial pains will be taken to build up the collections as rapidly and completely as possible.

Zoological Collections.—These collections occupy the lower floor of the wing of Coburn Hall and arrangements are being made to place exhibition cases in the corridors. Some of the alcoholic and formaline material is placed in wall cases in the biological laboratories. The collections consist of a number of the larger mammals of the State, a small set of exotic mammals, a more complete working collection of native birds' nests and eggs, an illustrative collection of the other groups of vertebrates, a rather large collection of the shells of native and exotic mollusca and illustrative collections of the other groups, dry, alcoholic, and prepared as microscopic objects.

The taxidermist has in mind a number of groups of Maine mammals and birds which will probably be on exhibition before many months. Many bird and mammal skins have been added during the summer, some by collection and others by donation. Information that will aid in preparing bird and mammal skins so that they can be mounted properly will gladly be furnished those who care to aid in increasing the value of the collections.

Botanical Collections.—These collections are situated in a room on the second floor of Coburn Hall, and in wall cases in the biological laboratories. The herbarium includes several collections of considerable value, the most important of which is the one presented to the University by Mr. Jonathan G. Clark, of Bangor, and made by the late Rev. Joseph Blake. It contains more than 7000 species of both flowering and flowerless plants, and represents more especially the flora of Maine and other New England States, but includes many forms from the western United States, Mexico, and the West Indies, and a number from many of the European and Asiatic countries, and from Africa and Australia. The late Professor Harvey left to the herbarium the general collections accumulated during his connection with the University, and his special collection of the weeds and forage plants of Maine, comprising 300 species. Other important collections are Collins's Algæ of the Maine coast, Halsted's Lichens of New England, Halsted's Weeds, Ellis and Everhard's North American Fungi, Cook's Illustrative Fungi, Underwood's Hepaticæ, Cummings and Seymour's North American Lichens, and a collection of economic seeds prepared by the U. S. Department of Agriculture. A number of specimens of wood, etc., representing the forest flora of the Philippines have recently been acquired, and plans are laid for adding a set illustrative of the timber trees of this State.

THE ART COLLECTION

The establishment of the Classical department in the University of Maine in 1899 marked the beginning of a fresh impetus in the College of Arts and Science. Parallel with the introduction of these studies has been the interest in an art collection which would ultimately serve to vitalize and intensify the work in the Humanities.

The collection which has gone forward with rapid growth consists of photographs, prints, engravings, polychrome reproductions, and plaster casts. Many of the large reproductions are framed and the entire collection has found a fitting home in the Library, the gallery of which is well adapted to the exhibition of many of the plaster-cast reliefs and the larger framed works. The collection is distributed on the first and second floors, in the large lecture room and in a seminar room. In the latter is a specially constructed cabinet for the mounted photographs.

The entire collection numbers upwards of 4000 reproductions of various sorts covering the fields of Classical and Renaissance architecture, sculpture and painting. The illustrations for the Greek, Florentine, and Venetian schools are particularly representative. For much of the most important work the photographs are supplemented by lantern slides.

The University is fortunate in possessing many of the famous polychrome prints published by the Arundel Society; these and many other colored reproductions covering nearly all the great masters of Italian painting have been framed; and in the case of the *Madonna della sedia* and the *Sistine Madonna* the reproductions were imported in the frames which are stucco copies of the originals in Dresden and Florence.

The large lecture room in the Library contains examples of the work of the chief Florentine and Umbrian masters of the 14th and 15th centuries, arranged on the walls in historical sequence. The gallery of the second floor is devoted to masters of the High Renaissance.

For the study of Greek and Roman antiquity the Classical department has a large collection of photographs and lantern slides. A stereopticon lantern is a part of the regular equipment in Classics and Art.

ORGANIZATIONS

The following is a list of organizations existing in the University: The Deutscher Verein, the Debating Society, the Electrical and Mechanical Society, Alpha Zeta, the Agricultural Club, the Civil Engineering Society, the Agricultural Society, the Chemical Society, the Literati, the Dramatic Club, the Phi Kappa Phi (honorary), the Young Men's Christian Association, the Young Women's Christian Association, the Athletic Association, the Glee Club, the Instrumental Club, the Band.

Junior Electrical and Mechanical Society.—The Junior Electrical and Mechanical Society aims to unite the interests of the electrical and mechanical students and to keep its members in touch with the practical side of engineering. The society meets each week when topics of practical interest are explained and discussed. All juniors in electrical or mechanical engineering are eligible to membership, and seniors are honorary members.

Alpha Zeta.—The Maine chapter of Alpha Zeta, the national agricultural fraternity, was organized at the University in 1905. Chapters exist in fourteen other universities. Membership is honorary and is restricted to those attaining high class standing, or to those who have shown marked ability along the lines of agricultural study and research.

The Agricultural Club.—This organization is composed of students taking agricultural courses. Meetings are held throughout the college year, at which times important agricultural topics are discussed by members of the club, and also by prominent speakers from this and other states.

The University of Maine Dramatic Club.—The Dramatic Club aims to make a practical study of the acted drama, and to present each year before the public one or more representative plays. Membership is determined by competitive trials to which all undergraduates are eligible.

The Literati.—This is an organization in the College of Arts and Sciences for the promotion of the literary, dramatic, and musical interests of the University.

Phi Kappa Phi.—The Phi Kappa Phi is an honorary society. At the end of the fall semester of the senior year the five members of the class having the highest standing are elected members, and at the end of the year the five next highest in the collegiate department, and two from the College of Law, are added.

The Young Men's Christian Association.—The Young Men's Christian Association, composed of students, has for its object the promotion of Christian fellowship and aggressive Christian work. Religious services are held in the Library, and classes for the study of the Bible are conducted on Sunday. This association is a branch of the national Young Men's Christian Association.

UNIVERSITY PUBLICATIONS

The Annual Catalog of the University of Maine.—This contains descriptions of the courses of study, lists of the trustees, faculty, and students, and other information relating to the University.

The Annual Report of the Trustees, President, and Treasurer, to the Governor and Council of the State.—The report of the trustees and president includes an account of the general affairs and interests of the University for the year, and the report of the Experiment Station. The report for the odd years contains the biennial catalog of graduates.

The University of Maine Studies.—These are occasional publications containing reports of investigations or researches made by university officers or alumni. The following have been issued:

1. The Effect of Magnetization upon the Elasticity of Rods. J. S. Stevens.
2. The Life History of the Nucula Delphinodonta (Mighels). G. A. Drew.
3. A Preliminary List of Maine Fungi. P. L. Ricker.
4. A Catalog and Bibliography of the Odonata of Maine. F. L. Harvey.
5. A Study of the Physiographic Ecology of Mount Ktaadn, Maine. L. H. Harvey.
6. The Habits, Anatomy, and Embryology of the Giant Scallop (Pecten tenuicostatus, Mighels). G. A. Drew.
7. Meteorological Conditions at Orono, Maine. J. S. Stevens.

The University Circulars.—These are occasional pamphlets, issued for special purposes. Those now ready for distribution relate to the Classical Course, the Courses in Agriculture, the Courses in Pharmacy, the College of law, the College of Arts and Sciences, the Courses in Engineering, the Course in Forestry, Student Expenses, and the Summer Term.

The Maine Bulletin.—This is a publication issued monthly during the academic year, to give information to the alumni and the general public.

The Annual Report of the Experiment Station, and the Experiment Station Bulletins.—These give complete results of the work of the station.

THE MAINE CAMPUS.—This is a journal published weekly during the academic year by an association of the students.

THE PRISM.—This is an illustrated annual, published by the junior class.

THE BLUE BOOK.—This is a literary magazine published monthly by the students.

MILITARY INSTRUCTION

Military instruction is required by law. The department is in charge of an officer of the regular army, detailed by the President of the United States for this purpose. United States army rifles, model 1898, ammunition, and accoutrements are furnished by the War Department. The course makes especial reference to the duties of Infantry officers of the line. The students are organized into an infantry battalion of four companies, officered by cadets selected for character, soldierly bearing, and military efficiency. The corps is instructed and disciplined in accordance with rules established by the President of the United States. These rules include the minimum course of instruction that must be covered, and the minimum time that must be devoted to this instruction.

The uniform prescribed by the board of trustees is as follows:

For commissioned officers, the new olive-drab service uniforms prescribed for infantry officers of the United States Army, except that "Maine" insignia and buttons are used; for non-commissioned officers, the new olive-drab service uniforms of the United States Army, except that "Maine" insignia and buttons are used, and trousers instead of breeches. The total cost of the uniform is $14.15. The uniforms are procured through an authorized tailor, and are made in the best manner, of thoroughly good material. Cadets are required to wear the uniform when on military duty, and may wear the same at other times.

The three seniors who attain the highest standing in the military department are reported to the military secretary to the U. S. Army, and their names are printed in the U. S. Army Register. Cadets who have satisfactorily completed the course in military science receive at graduation a certificate of military proficiency and are reported to the Adjutant General of Maine.

Service in the military department is required as follows:

All students physically qualified are required to take one year's military work during their first year at the University, except that those admitted to advanced standing may elect other work equal to one credit. One credit is allowed for this work. Those physically disqualified are

required to elect other work equal to one credit in lieu of military work. Graduation requirements include one year's military work, or a substitute under the above conditions. No fractional credit for military work will count towards graduation. Military instruction is arranged in a four years' course. After the freshman year the work is elective. Students in the College of Law, the School Course in Agriculture, and the Short Course in Pharmacy, ,are excused from military work.

The grades and relative rank of officers and non-commissioned officers will be determined by the Professor in charge, subject to the approval of the President.

PHYSICAL TRAINING

Physical training is required of juniors and sophomores two hours per week. Credit is given on the basis of three hours of physical training to one hour of recitation. Seniors and freshmen may elect this work and receive credit. Students registered on athletic teams are excused from this prescribed physical training during the time they are engaged in the regular athletic training, but no credit will be given for the athletic training unless the physical training is taken for the remainder of the year. Sophomores and juniors electing military work will be excused from work in physical training.

All students have the opportunity of taking a systematic course in physical training. The athletic field is situated a short distance from the gymnasium; it has a quarter mile running track with a 220 yard straightaway and is graded and laid out for football, baseball, and track athletics. Here the men may exercise for recreation or train for active competition. There are several tennis courts on the University campus. On the Stillwater river canoeing may be enjoyed, as well as skating and ice hockey in the winter.

The gymnasium affords excellent opportunity for physical training. On the first floor are the main offices, the office of the physical director, the baseball cage, lockers, bathrooms and toilet rooms. The gymnasium proper is located on the second floor. There is a floor space of 6,550 square feet and an overhead running track. This is supplied with an equipment of modern apparatus for heavy and light gymnastic work.

Every student registering for an athletic team must pass the required physical examination.

As the student life is of necessity sedentary the average man is given hygienic and recreative work. Those who have deformities, either of the muscular or skeletal systems, are given the proper corrective work, and those who are sufficiently vigorous may become candidates for the vari-

ous athletic teams. Since the work in this department is required, an effort is made to make the exercises as attractive as possible.

All students exercising at class hours wear the regulation suit which consists of white shirt, white running pants with blue stripe and white rubber sole shoes. From September 20th to June 15th exercises adapted to the whole student body are carried on.

It is the aim of the department of physical training to encourage participation in all forms of wholesome out-door exercise and to arouse a general interest in athletic sport. In this way the benefits will become less and less confined to the few who need them least.

Instead of requiring gymnasium work of students who do not particularly need it, those who are physically fit are encouraged to register for an athletic team, the department of physical training maintaining a reasonable supervision to insure regularity.

All of the physical training is in charge of the University Physician, from whom the students may receive medical attention. For the first consultation no charge is made; for subsequent consultation the regular physician's fee is charged.

PUBLIC WORSHIP

Short religious services are held in the chapel every day except Saturday and Sunday. All undergraduate students are required to be present. Students receive a cordial welcome at all services in the churches of the village. Voluntary religious services, under the direction of the Young Men's Christian Association, are held twice each week. The Day of Prayer for Colleges is observed with appropriate exercises.

GENERAL REGULATIONS

The regulations in regard to the selection of studies, standing and grades, absences from recitations and examinations, entrance conditions, leave of absence, attendance upon chapel, penalties, examinations, and athletics, are printed in a small pamphlet, which may be obtained from the Secretary.

By these regulations, the quota of regular studies for each student varies from a minimum of fourteen hours, to a maximum of twenty-two hours of class-room work each week. In the application of this rule, two hours of laboratory work, or of other exercises not requiring preparation, count as one hour, unless otherwise stated.

Excuses for absence from individual exercises are not required. Each student is expected to be present at all recitations and other exercises except when imperative reasons require absence. Of these reasons he is

the judge; but if any student shall, in one semester, have been absent, without excuse, fifteen times from chapel, or seven times from a subject occurring five times a week, or six times from a subject occurring four times a week, or four times from a three hour subject, or two times from a two hour subject, or once from a one hour subject, he shall be notified by the Secretary. If after such notice he shall have two additional unexcused absences he shall be placed under the censure of the Faculty, and if the absences are from class work he shall also be excluded from examination. Notice of such exclusion shall be given to the student at once by the Secretary. If after notice of exclusion he shall have any more unexcused absences in the same subject he shall be dropped from that class.

Written examinations are held immediately before the beginning of the fall semester for all studies in arrears. A student absent from the University by permission of the Faculty, at the time of these arrearage examinations, may have a special examination at such time as may be arranged with the instructor under whom the arrearage occurred. For such a special examination a fee of two dollars shall be paid to the University. A student who fails to make up an arrearage in a required subject before the study is again given in class is required to attend recitations in that study, or make up the work under a tutor selected by the Faculty.

Each student is given a report of his work shortly after the close of each semester. Parents or guardians may obtain these reports upon application to the Secretary. The passing rank in all subjects is seventy per cent.

SCHOLARSHIP HONORS

Honors for scholarship are of two kinds, general and special. General honors are awarded, at graduation, to students who attain an average standing, after the freshman year, of ninety on a scale of one hundred. Special honors are granted for the satisfactory completion of an honor course in addition to the work required for a degree. An honor course must involve at least ninety recitations, or an equivalent, and be completed in one year. The methods of work are determined by the instructor, who should be consulted in each case by students desiring to take such a course. Honor courses are open to juniors and seniors who have attained an average standing of eighty per cent. in all previous work, and an average standing of ninety per cent. in all previous work of the department in which the honors are sought. A student may not register for an honor course later than the fourth week of the fall semester. Upon the completion of a course, the student's work will be tested

by an examination, or thesis, or both, under the direction of the faculty committee on honors, and the result, together with the instructor's report, will be laid before the Faculty. Examinations for honors shall be held at such times and places as the committee on honors may appoint. They shall be distinct from any class examinations in the same course, which latter examinations the candidate for honors may or may not take, as he chooses. The honor examination shall be written and, if the committee so desires, also oral. The Professors giving the courses shall submit to the committee papers for the honor examinations not later than one week before the date set for the examinations.

The students in honor courses involving laboratory or drawing-room work may be tested by examination, or thesis, or both, at the discretion of the committee. The note books kept in such work shall be submitted to the committee and may take the place of a thesis in case they show practically the whole work of the course. The Faculty may grant special honors to those students who receive the approval of the committee, but shall not do so if the general work is unsatisfactory. Honors, and their nature, are stated upon the Commencement program and published in the annual catalog.

The fifteen of highest rank in the senior class are authorized to prepare commencement parts; these parts must be submitted to a committee by the close of the spring recess, and from the parts submitted, a certain number are selected by the committee. These parts must be prepared for delivery to the satisfaction of a representative of the Faculty.

DEGREES

Bachelors' Degrees

The degree of Bachelor of Arts (B. A.) is conferred upon students who have passed the proper entrance requirements and have included in their course one year's work in either Latin or Greek.

The degree of Bachelor of Science (B. S.) is conferred upon students who complete the Chemical, Agricultural, Civil Engineering, Mechanical Engineering, Electrical Engineering, Mining Engineering, Forestry, or Pharmacy Course; or who have completed a general course with major work in some one department. The diploma indicates which course has been completed.

The degree of Pharmaceutical Chemist (Ph. C.) is conferred upon students who complete the Short Pharmacy Course.

The degree of Bachelor of Laws (LL. B.) is conferred upon students who complete the Law Course.

In order to receive degrees at Commencement, candidates must have completed by the close of the spring recess, at least seven-eighths of all the work required for graduation, with the exception of arrearage courses repeated in class during the spring semester of the senior year.

A member of the senior class who at the end of the first semester is deficient in any subject in which no regular examination is to be held during the remainder of the year, may be examined not later than the last Friday of the year, at such time and in such manner as the instructor having charge of that study may determine. Except under extraordinary circumstances, no special examination will be allowed to a senior who fails in, or is excluded from, a final examination at the end of the spring semester.

Theses required from candidates for the degree of B. S. must be completed to the satisfaction of the major instructor and deposited in the library, accompanied by the binding fee, not later than twelve o'clock (noon), nine days preceding Commencement. They shall be printed or typewritten, unless the subject matter prevents, on paper of good quality, 8 inches by 10½ inches, with not less than one inch margin on inner edge and half-inch margin on outer edges. They shall be bound in black leather with title on first cover. Drawings accompanying a thesis may be folded and bound with the thesis, or placed in a pocket on the third page of the cover; or, if too many for this, they may be bound separately, in size to suit the drawings.

Candidates for degrees who fail to meet these requirements will not be awarded their degrees, and their names will not appear on the Commencement program. A minimum residence of one year is required for the attainment of any bachelor's degree.

Advanced Degrees

Candidates for the degree of Master of Arts or Master of Science must have received the corresponding bachelor's degree from this institution, or from one granting a fully equivalent degree.

At least one year must elapse between the conferring of the bachelor's and master's degrees.

No work done before the conferring of the bachelor's degree shall be counted toward the master's degree.

The candidate shall devote at least one year to graduate resident study and shall complete work of the equivalent of six credits or fifteen hours per week throughout a college year.

The course of study for each candidate must be approved by the committee on advanced degrees not later than the first week in October. A

registration fee of $5 is charged, and an additional fee of $15 for examinations and diploma is payable upon the completion of the work.

The course of study shall consist of work in one major department or subject in which the candidate has already pursued undergraduate study for at least two years, and work in not more than two minor subjects which bears a distinct relation to the general plan or purpose of his major subject.

At least three-fifths of the work must be done in the major subject. In special cases all the work may be done in one department.

All of the work must be of advanced character and must be tested by examinations which the candidate must pass with distinction.

The candidate shall prepare as a part of his course of study a satisfactory thesis on some topic connected with his major subject which may count for not more than three of the required fifteen hours. Theses must be submitted not later than May 20th. The same regulations regarding the size and style of binding, outlined under the Bachelor's degree, apply here.

For the conditions for the degree of Master of Laws see the statements under the College of Law.

The professional degrees of Civil Engineer (C. E.), Mechanical Engineer (M. E.), and Electrical Engineer (E. E.), may be conferred upon graduates of the Civil Engineering, Mechanical Engineering, and Electrical Engineering Courses, respectively, upon the presentation of a satisfactory thesis after at least three years of professional work subsequent to graduation. A fee of $10.00 is required, payable upon presentation of the thesis, which must be submitted not later than May 20. Candidates are expected to be present in person to receive their degrees.

STUDENT EXPENSES

Many students go through college with an annual expenditure of little more than $200, exclusive of the expense of clothing, travel, and vacation, and very many earn a part of this sum by vacation work. An estimate of the necessary annual expenses of a student in any department, except the College of Law, is made in the following table. For the expenses of students in the College of Law, see the article on that College. It should be noticed that clothing, traveling, vacation, society, and personal expenses are not included in the table. These vary according to individual tastes and habits. The table is made up for men students who room in Oak Hall and board at the Commons. The necessary expenses of other students are sometimes lower, but usually slightly higher. In all cases an allowance must be made for personal incidental expenses.

ANNUAL STUDENT EXPENSES

Tuition, 2 semesters at $15.00 or $20.00	$30.00 or	$40 00
Registration fee, 2 semesters at $5.00		10 00
Incidentals, 2 semesters at $10.00		20 00
Laboratory fees, (average) about		10 00
Text-books, about		15 00
Board, 36 weeks at $3.00 or $3.50	$108.00 or	126 00
Heat and light for half room, and general care of dormitory		30 60
Total	$223.60 or	$251 60

The tuition charge is $15.00 a semester, or $30.00 a year, and all students are subject to this charge except those in the courses in agriculture, for none of which is any *tuition* charge made, but incidental and registration fees are the same as in other courses. Residents of Maine who need assistance and maintain a good record may obtain, from the University, loans to cover the tuition charge. The regulations in regard to these loans are stated on page 40.

Students who are not residents of the State of Maine are charged an annual tuition of $40.00.

The registration fee of $5.00 must be paid at the beginning of each semester before the student enters any classes.

The incidental fee is $10.00 a semester, or $20.00 a year, and covers heat and light for public buildings, reading-room charges, care of public rooms, and miscellaneous expenses.

A student obliged to leave the University within two weeks after the beginning of the semester may have the foregoing amounts refunded with the exception of the registration fee. A student leaving within the first half of the semester receives a rebate of one-half the incidental expenses, and one-half of the tuition. No other rebate is made.

The cost of text-books will average about $15.00 a year for the course. These may be bought at the college store. The expense may be decreased by buying second-hand books and selling them after using them.

Students in the laboratories and shops pay certain charges to cover the cost of materials and maintenance. These charges are as follows: chemistry, per semester, about $3.00; bacteriology, per course, $3.00; physics, per course, $2.50 to $4.00; pharmacy, per semester, about $3.50; mineralogy, $2.00; biology, per course, $1.00 to $3.00; civil engineering, $2.00 to $5.00; electrical engineering, per course, $2.50; mechanical engineering, per course, $2.00; shop, per course, $4.00 to $5.00.

The largest item of expense is board. At the Commons, the university boarding house, the price is about $3.00 a week. Board may be obtained in clubs or private families at prices ranging from $3.00 to $4.00 a week.

The charge for rooms in Oak Hall is eighty-five cents a week for each student, when two occupy a room. This pays for heat and light, and for the lighting and care of the halls, public rooms, and dormitory. Furnished rooms, with light and heat, may be obtained in the village for $1.50 a week if occupied by one person, or $2.00-$3.00 a week if occupied by two persons.

Women students who do not live at their own homes are required to room and board at the Mt. Vernon House. All the rooms are supplied with the larger articles of furniture. Six of the ten rooms are corner rooms and the rent, including heat and light, is $1,25 a week for each person, with two in a room. The rate for the other rooms, including heat and light, is $1.00 a week for each person, with two in a room. The price of board is $3.50 a week.

Students in Oak Hall supply their own furniture with the exception of a cot bed. Those desiring rooms in Oak Hall or Mt. Vernon House should make early application to the Secretary, as the accommodations are limited. Students are required to furnish three sheets and two pillow cases in addition to the other bedding.

Each student is required to deposit with the treasurer a bond, with two good names as sureties, in the amount of $150.00, to cover bills. Blank forms for bonds will be furnished by the Secretary upon application. Those who keep a sufficient deposit with the Treasurer to cover the bills of one semester will not be required to furnish a bond. The deposit required is $90.00 from those who board at the Commons or Mt. Vernon House, and $30.00 from others. This deposit is in addition to the registration fee, and must be paid at the beginning of each semester. No student will be allowed to graduate who is in debt to the treasury.

A circular containing a fuller statement in regard to expenses and treating of the opportunities for self-help may be obtained upon application.

LOANS

Tuition Loans

Residents of Maine who need assistance and maintain a satisfactory record may borrow from the university treasury a sum sufficient to pay the tuition charge. This privilege is not extended to students in the College of Law.

Borrowers are required to give notes with satisfactory endorsement. The loans bear interest at six per cent. per annum, and are due at the rate of $30.00 a year, beginning with the first year after graduation, but may be paid earlier. No member of the Faculty is accepted as an endorser.

Loans are granted by a committee consisting of the President and two other members of the Faculty. The number of loans may not exceed one-third of the number of students in the undergraduate departments. Loans are granted to cover the tuition charges of one year at a time.

The first grant of loans for each university year is made in the preceding June. Applications for loans are considered during May, and to insure attention at this time should be forwarded to the President not later than May 15. A second awar ' is made in the fall semester. Applications should be made not later than October 10. They must be made to the President upon blanks to be obtained from the Secretary of the Faculty. Awards made in June may be withdrawn from students who do not register, or claim their loans, by October 10.

The Kittredge Loan Fund

This fund, amounting to nearly one thousand dollars, was established by Nehemiah Kittredge, of Bangor. It is in the control of the President and Treasurer of the University, by whom it is loaned to needy students in the three upper classes. In the deed of gift it was prescribed that no security, but personal notes bearing interest at the prevailing rate should be required. Loans are made on the conditions that the interest shall be paid promptly, and that the principal shall be returned from the first earnings after graduation.

SCHOLARSHIPS AND PRIZES

The Kidder Scholarship, thirty dollars, was endowed by Frank E. Kidder, Ph. D., Denver, Colorado, a graduate of the University, of the class of 1879, and is awarded to a member of the junior class to be selected by the President and the Faculty.

The Western Alumni Association Scholarship, tuition for the sophomore year, will be awarded to that student taking a regular course, whose deportment is satisfactory, and who shall make the best progress in all studies during his freshman year.

The Junior Exhibition Prize, fifteen dollars, will be awarded to that member of the junior class who shall present the best oration at the junior exhibition. In the award of this prize, both the composition and the delivery of the oration will be considered.

The Sophomore Declamation Prize, fifteen dollars, for excellence in elocution, will be awarded to the best speaker in the sophomore class.

The Walter Balentine Prize, fifteen dollars, the gift of Whitman H. Jordan, Sc. D., Geneva, N. Y., a graduate of the University, of the class of 1875, will be awarded to that member of the junior class who shall excel in biological chemistry.

The Kennebec County Prize, twenty-five dollars, the gift of Hon. William T. Haines, Waterville, a graduate of the University, of the class of 1876, will be awarded to that member of the senior class who shall write the best essay on applied electricity.

The Franklin Danforth Prize, ten dollars, the gift of the Hon. Edward F. Danforth, Skowhegan, a graduate of the University, of the class of 1877, in memory of his father, Franklin Danforth, will be awarded to that member of the senior class in the agricultural course who shall attain the highest standing.

The Pharmacy Prize, five dollars, will be awarded to that student in the pharmacy department who shall attain the highest standing in chemistry in the last year of his course.

The Holt Prizes, the gift of Erastus Eugene Holt, A. M., M. D., LL. D., of Portland, will be given to the three students of the class of 1908 who show the greatest improvement in their rating. The rating will be determined from deductions made from the gymnasium and class records of the students at the beginning and end of their college course by the mathematical formula for the normal earning ability of the body, devised by Dr. Holt.

The Boston Alumni Association Scholarship, thirty dollars, will be awarded to that member of the junior class who shall make the most satisfactory progress in all studies during the junior year, and whose deportment is satisfactory, and who shall need financial assistance.

The New York Alumni Association Scholarship, thirty dollars, will be awarded upon conditions to be determined by the Board of Trustees. In 1906-7 it was awarded to the student who excelled in debate.

The Pittsburg Alumni Association Scholarship, yielding tuition for one student for one year, will be awarded to a member of the junior class in the College of Engineering, to be selected by the President and Professors in that College.

Mr. L. C. Bateman, of the *Lewiston Journal,* offers a prize of $10.00 for the best essay on Dairy Bacteriology, by any student in any agricultural course.

Hon. E. B. Winslow, of Portland, offers a cash prize of $10.00 to be awarded for the highest scoring butter, made and exhibited by any person who has taken the dairy course at the University of Maine. The butter is to be shown at the annual meeting of the Maine Dairy Association.

ADMISSION

General Requirements.—Applicants for admission must pass the required examinations, or present satisfactory certificates of fitness, and file with the Treasurer a bond for $150 signed by two bondsmen, as security for the payment of term bills. A cash deposit covering the bills of one semester will be accepted in place of a bond. In the College of Law the fees must be paid in advance, and no bond or deposit is required. The University admits men and women, both residents of Maine and non-residents.

Admission to Advanced Standing.—Candidates for advanced standing are examined in the preparatory studies, and in those previously pursued by the classes they propose to enter, or in other equivalent studies. A rank of 80 per cent. must be attained in order to pass any course in advance. Certificates from approved schools are accepted for the preparatory work; but certificates are not accepted for any part of the college work, unless such work has been done in a college. Graduates of a college of equivalent standing who wish to enter a technical course are admitted to the junior class without examination, provided their course has covered a sufficient amount of work in mathematics, physics, and chemistry.

Special Recommendations.—A good preparation in algebra and geometry is most important for those who expect to enter engineering courses. The schools should give a part of the work in algebra and geometry, or a review of these subjects, during the last year.

Students preparing for the classical courses should devote especial attention to Latin composition, Roman history, and Latin pronunciation according to the Roman method.

Special Students.—Persons not candidates for a degree, who wish to take special studies, may be permitted to do so, if, upon examination, they give satisfactory evidence that they are prepared to take the desired studies. If they subsequently desire to become candidates for a degree, or to take a regular course, they will be required to pass all the entrance examinations. This privilege is intended for students of unusual maturity or previous advancement in particular subjects, not for those who are incompetent to pursue a regular course.

No examinations are required for admission to the special and extension courses in agriculture.

The terms of admission to the College of Law are stated under the proper heading.

Admission by Examinations

Entrance examinations are held at Orono, beginning three days before the opening of the fall semester, and on the Thursday, Friday, and Saturday preceding Commencement. To save expense to candidates, examination papers will be sent to any satisfactory person who will consent to conduct examinations on the days appointed in June. Papers will not be sent at any other time. The questions are to be submitted under the usual restrictions of a written examination, and the answers returned to the University accompanied by the endorsement of the examiner. Applications for such examinations must be made out on blanks to be obtained from the Secretary of the Faculty. Candidates for admission by examination, particularly those examined at Orono in September, should present statements from their Principals regarding their fitness to take the examinations, and to undertake college work. The examinations set by the College Entrance Examination Board will be accepted in place of the above. A candidate who wishes to be examined on part of his work in advance of the year in which he proposes to enter the University may receive credit for such examination, provided he offers not less than one-half of his preparatory work. It is urged that candidates avail themselves of this privilege so far as possible. Examinations on subjects which are to be continued in college should not be taken more than one year in advance.

Admission by Certificate

Certificates for admission to the freshman class without examination are accepted only from graduates of schools approved by the New England College Entrance Certificate Board (except in the case of schools outside of New England). They will not be accepted for non-graduates except in extraordinary cases, and then only provided the candidate is expressly recommended for admission by the Principal of the school from which he comes. Certificates must be made out on blanks furnished by the University.

Certificates from schools approved by the above-mentioned Board will be accepted at any of the institutions co-operating to maintain it. Any Superintendent or Principal desiring to have a school under his charge placed upon the approved list should apply before April 1st to the Secretary of the Board, Professor Nathaniel F. Davis, 159 Brown St., Providence, R. I.

ENTRANCE REQUIREMENTS

The requirements for admission are those adopted by the Maine Association of Colleges and Preparatory Schools.

* To gain admission to any of the courses leading to the degrees of B. A. or B. S., 28 points must be offered by the candidate, according to the following schedules (to count 2 points, a subject must be pursued for one school year, with five recitation periods, of at least 45 minutes each, a week):

For the B. A. Courses

Required Subjects

College Entrance English	counts	6 points
Latin	"	8 "
Algebra	"	4 "
Plane Geometry	"	2 "
Roman History	"	1 point
		21

Optional Subjects (8 Points to be Chosen)

(If Greek is not taken, French or German must be; and if Greek is taken, Greek History must be taken also. Not less than four points of any foreign language will be accepted, except under special conditions.)

Each year of Greek	counts	2 points
" " French	"	2 "
" " German	"	2 "
Chemistry (including note-book)	"	2 "
Physics (including note-book)	"	2 "
Solid Geometry	"	1 point
Greek History	"	1 "
English "	"	1 "
American History and Civil Government	"	1 "

For the B. S. Courses

(Engineering, Agriculture, Chemistry, Forestry, and all other courses not leading to the B. A. degree)

Required Subjects

College Entrance English	counts	6 points
Algebra	"	4 "
Plane Geometry	"	2 "

* Beginning with the fall semester of 1909 29 points will be required of all candidates for admission.

Solid Geometry (College of Technology and Forestry Course)	counts 1 point
	13

Optional Subjects (16 or 17 Points to be Chosen)

(Of these, two years of one modern language, one year of science, and one year of history must be taken. Not less than four points of any foreign language will be accepted except under special conditions. Candidates entering a B. S. course and offering four years of Latin may complete their entrance credits without a modern language, but must take at least four credits in modern language work in college.)

Each year of French	counts 2 points
" " German	" 2 "
" " Latin	" 2 "
" " Greek	" 2 "
Advanced Mathematics (Algebra and Plane and Spherical Trigonometry)	" 2 "
* Mechanical Drawing (for technical courses)	" 1 point
* Manual Training (for technical courses)	" 1 "
Chemistry (including note-book)	counts 2 points
Physics (including note-book)	" 2 "
Physiography	counts 1 point or 2 "
Biology (including note-book)	counts 2 "
Botany (including note-book)	" 2 "
Zoölogy (including note-book)	" 2 "
Physiology	" 1 "
Roman History	" 1 point
Greek History	" 1 "
English History	" 1 "
American History and Civil Government	" 1 "

Candidates for the SHORT COURSE IN PHARMACY (two years) are examined on *Elementary Subjects,* Descriptive Geography, Arithmetic, English Grammar, Physiology; *History,* United States; *Mathematics,* Algebra through simple equations of the first degree.

---

* Graduates from high schools giving a full manual training course may receive credit for mechanical drawing, manual training, and free-hand drawing on the basis of one credit for five forty-five minute periods per week for one year in one subject.

REQUIREMENTS IN DETAIL

The following statement will show in detail the requirements in each subject.

Language

English.—Inasmuch as the examination in English is designed quite as much to test the candidate's ability to express himself well in his mother tongue as to test his knowledge of the books prescribed, the student is urgently advised to pursue a thorough course in English composition, in which at least a part of the subjects written upon are from his own observation and experience. He is further urged to cultivate, in all his writing, habits of correctness in spelling, grammar, sentence structure, punctuation, and paragraphing. The examiner will regard mere knowledge of the books as less important than the ability to write good English.

Grammar. The usual school course.

Reading and Practice. The candidate is expected to read intelligently all the books prescribed. He should read them as he reads other books; he is expected to have only a general knowledge of their substance, but to have freshly in mind their most important parts. To test his knowledge and his power of clear and accurate expression, he will be required to write one or two paragraphs on each of several topics set before him on the examination paper. In place of this test the candidate may present an exercise book, certified by his instructor, containing compositions or other written work done in connection with the reading of the books.

In 1906, 1907, and 1908, it will be based upon: Shakespeare's Macbeth and The Merchant of Venice; The Sir Roger de Coverly Papers in The Spectator; Irving's Life of Goldsmith; Coleridge's The Ancient Mariner; Scott's Ivanhoe and the Lady of the Lake; Tennyson's Gareth and Lynette, Lancelot and Elaine, and The Passing of Arthur; Lowell's The Vision of Sir Launfal; George Eliot's Silas Marner.

Study and Practice. This part of the examination presupposes a careful study of the works named below. The examination will be upon subject matter, form, and structure; and will also test the candidate's ability to express his knowledge with clearness and accuracy.

In 1906, 1907, and 1908, it will be based upon: Shakespeare's Julius Cæsar; Milton's L'Allegro, Il Penseroso, Comus, and Lycidas; Burke's Speech on Conciliation with America; Macaulay's Essay on Milton and Life of Johnson.

French.—*First Year.* Pronunciation; rudiments of grammar, including inflection of the regular and irregular verbs, plural of nouns, inflec-

tion of adjectives, participles, and pronouns, use of personal pronouns, common adverbs, prepositions and conjunctions, word order, and elementary syntax; abundant easy exercises; 100-175 pages of graduated texts; practice in translating into French variations of sentences read; dictation, and reproduction from memory of sentences from text. Super's, or Whitney's Reader is recommended.

Second Year. 250-400 pages of easy modern prose; constant practice in translation of easy variations of the text into French; abstracts of the text; continuation of grammar; dictation.

The following texts are recommended: (1) Perrault's Contes de Fées, or Daudet's Easier Short Stories; (2) Erckmann-Chatrian's Mme. Thérèse or Conscrit de 1813, or About's Roi des Montagnes, or Merimée's Colomba; (3) Labiche's Voyage de M. Perrichon, or Labiche et Martin's La Poudre aux Yeux.

Third Year. 400-600 pages of ordinary difficulty; constant practice in French paraphrases, abstracts, reproductions from memory; study of a grammar of moderate completeness; dictation.

The following texts are recommended: (1) Sandeau's Mlle. de la Seiglière, or Augier et Sandeau's Le Gendre de M. Poirier; (2) Corneille's Le Cid or Horace; (3) Racine's Athalie or Andromaque; (4) Molière's L'Avare or Le Bourgeois Gentilhomme; (5) Hugo's Hernani, or Coppée's Poems.

GERMAN.—*First Year.* Pronunciation: memorizing and frequent repetition of easy colloquial sentences; grammar: article, commonly used nouns, adjectives, pronouns, weak verbs and more used strong verbs, more common prepositions, simpler uses of modal auxiliaries, elementary rules of syntax and word-order; abundant easy exercises in composition; 75-100 pages of graduated texts from a reader; constant practice in translating into German easy variations of text, and reproduction from memory of sentences from text.

Second Year. Continued drill on rudiments of grammar; 150-200 pages of easy stories and plays; continued translation into German of easy variations on matter read and off-hand reproduction, orally and in writing.

The following texts are recommended: (1) Andersen's Märchen or Bilderbuch, or Leander's Träumereien, about forty pages; (2) Hauff's Das Kalte Herz, or Zschockke's Der Zerbrochene Krug; (3) Hillern's Höher als die Kirche, or Storm's Immensee; (4) a short story from Heyse or Baumbach or Seidl; (5) Benedix' Der Prozess.

Third Year. (See below.) Grammar; less usual strong verbs, use of articles, cases, auxiliaries, tenses and moods (particularly the infinitive and subjunctive), word-order and word-formation; about 400 pages of

moderately difficult prose and poetry; constant practice in paraphrases, abstracts, and memory reproductions of passages read.

The following texts are recommended: (1) one of Riehl's Noveletten; (2) a part of Freytag's Bilder aus der Deutschen Vergangenheit; (3) a part of Fouqué's Undine, or a part of Schiller's Geisterseher; (4) a short course in Lyrics and Ballads; (5) one classical play by Goethe, or Schiller, or Lessing.

Candidates may present themselves for an examination in French or German based upon the Third Year Courses outlined above, and upon obtaining a rank of 80 per cent. will be allowed to pursue advanced work in college.

Latin.—The grammar, including prosody; Cæsar's Gallic War, books I-IV; Cicero's four orations against Catiline, and those for Archias and for the Manilian Law; Vergil's Æneid, books I-VI, and the equivalent from Vergil or Ovid of an additional book; the sight translation of Latin passages of moderate difficulty; the translation into Latin of simple English sentences, and of easy narrative passages based on the prose authors read. For the last a vocabulary of less usual words will be furnished. Equivalent readings will be accepted for those prescribed.

Greek.—The grammar, including prosody; Xenophon's Anabasis, books I-IV; Homer's Iliad, books I-III; the sight translation of easy passages from Xenophon; the translation into Greek of easy passages based on the required books of the Anabasis. For the last a vocabulary of less usual words will be furnished. Equivalent readings will be accepted in place of those prescribed.

History

Greek History.—History of Greece, to the capture of Corinth, 146 B. C. Myers, Morey, or Botsford.

Roman History.—A knowledge of Roman history, down to the death of Marcus Aurelius, such as may be obtained from Allen's Short History of the Roman People, or from Myers's Rome: Its Rise and Fall, or from Morey's Outlines of Roman History.

English History.—A knowledge such as may be obtained from Montgomery, Coman and Kendall, Terry, or Cheyney's History of England.

United States History.—A knowledge such as may be obtained from Fiske, Hart, Montgomery, or McLaughlin's History of the United States.

Mathematics

Algebra.—The elements, equations of the first degree, radicals, the theory of exponents, quadratic equations, ratio and proportion, arithmetical and geometrical progression, the binomial theorem. The preparation in algebra should include, in addition to the mastery of the principal topics in one of the standard elementary text-books, drill with a more advanced text-book or with some standard exercise book. Candidates cannot safely give to algebra less than the two full years called for in the algebra requirements, unless their preparation in arithmetic has been exceptionally thorough. Candidates for the short course in pharmacy will be examined on no topics beyond simple equations of the first degree.

Plane Geometry.—The usual school course. The requirement in plane geometry and solid geometry is covered by the syllabus of plane and solid geometry issued by the Association of Mathematical Teachers in New England. This syllabus is recommended to the attention of teachers. Numerical exercises, original propositions, and the neat and careful construction of figures should not be neglected. The examination will include original propositions for demonstration or construction.

Solid Geometry.—See statement above under plane geometry. The examination will be planned to test the candidate's ability to apply the theorems to the computation of surfaces and volumes, as well as his readiness in demonstration. Much attention should be given to numerical exercises and strict accuracy should be insisted upon.

Sciences

* Chemistry.—The necessary ground is covered by the following text-books: Fisher, Remsen, Roscoe (inorganic part), Shepard, Storer, and Lindsay, Williams.

Physical Geography (Physiography).—A satisfactory preparation may be obtained from Appleton's Physical Geography.

* Physics.—The work usually covered in one year in a good fitting school.

* Biology.—This may consist of a continuous course for one year dealing with the problems of general biology, including the study of the structure, functions, and habits of both plants and animals; a course for

---

* The work is these sciences must include certified note-books exhibiting the results of experimental work performed by the student. In physics forty exercises are required and in chemistry fifty exercises. These note-boks should be presented at the examination.

one year in botany alone; a course for one year in zoölogy alone; or a course for one half year in human physiology. The human physiology may be arranged to form a part of the general biology, or of the zoölogy, but in such cases it must be treated as an integral part of the subject under consideration.

Elementary Subjects

Descriptive Geography.—The usual school course. Required for short pharmacy course only.

Arithmetic.—The usual school course, including the metric system of weights and measures. Required for the short pharmacy course only.

REQUIREMENTS FOR GRADUATION

The college year is divided equally into a fall semester and a spring semester. Five recitation hours a week of successful work for one semester entitle a student to one credit. The minimum regular work for a semester in the College of Arts and Sciences is fourteen hours a week (exclusive of physical training and military science), leading to two and eight-tenths credits. In the other Colleges the minimum is seventeen hours a week (exclusive of physical training and military science), leading to three and two-fifths credits. Six credits represent the minimum work of a year required for a degree. In making up the quota of studies, laboratory work, and other studies not requiring preparation, count as half time, unless otherwise specified. The hours devoted to such studies are marked with a star (*) or dagger (†) in the detailed description of courses of instruction.

Except in the College of Law, the Short Pharmacy Course, and the School Course in Agriculture, candidates for graduation are required to complete a four-years' course of study by securing from twenty-five to thirty credits, according to the course chosen.

DEPARTMENTS OF INSTRUCTION

Note:—The prefix of a star (*) before the time designated for a course indicates that three hours of actual work are required to obtain credit for one hour, while a dagger (†) indicates that two hours are required to obtain this credit. This system presupposes that one hour of recitation work requires two hours of preparation.

AGRONOMY

Professor Hurd; Professor McClintock; Professor Waid

Ag 1. Soils.—Lectures and recitations beginning with the classification of and fundamental principles underlying the science of Agriculture; the nature, origin, formation, and classification of soils; the relation of soils to plants, water, heat, gases, etc.; the chemical elements in soils; factors determining soil fertility; soil inoculation; the conservation of soil moisture; the adaptability of crops to different kinds of soils; the objects and benefits of crop rotation; the improvement of unproductive land, the conditions requiring, necessity for, advantages, and methods of drainage; irrigation. *Two hours a week.* Fall semester.

Ag 2. Soil Physics.—A course taken in connection with Ag 1, consisting of a study of the different soils under field conditions; soil surveying and mapping; the collecting and sampling of soils for laboratory work. This laboratory course is designed to prepare the student to better understand the different methods of treatment of soils and the effect of these methods upon moisture, texture, aeration, fertility, and production. The work comprises the determination of such constants as specific gravity, water-holding capacity, evaporation and capillary power of various types of soils, and the mechanical analysis of soils. † *Two hours a week.* Fall semester.

Ag 3. Agricultural Engineering and Farm Mechanics.—
(a) *Farm Surveying and Drainage.* The plotting of farms and the measurement of land; leveling for drains, estimating size of tile required, cost of drain, etc.; the making of roads, with practice in the construction of roads on the college farm.

(b) *Farm Mechanics and Farm Machinery.* A study of the simpler laws of mechanics used in operating farm implements; the principles of draft, the handling in the field, the taking apart and the putting together of the different classes of farm implements in possession of the department; the relative merits of wind, gasoline, denatured alcohol, steam, and electricity, as sources of power on the farm.

(c) *Farm Management.* A study of different forms and types of farming; the keeping of farm accounts; the planning of a season's work; the management of men and teams; and estimated cost of different farming operations.

(d) *Rural Architecture.* The planning, designing, location, and construction of farm buildings, including water supply, sewage, etc. † *Four hours a week.* Fall semester.

Ag 4. Manures and Fertilizers.—A study of the value of stable manure in successful crop production; its chemical composition, preservation, best methods of storing, and time and manner of applying on the land; the source, chemical composition, and comparative value of chemicals used as fertilizers; the working out of fertilizer formulæ suited to the needs of different soils and special crops; the importance of lime in agriculture, its physical and chemical effect on different soils, best forms to buy, when to apply, and the amount to use. Practice in home mixing fertilizers and field tests is given students each year on the college farm. *Two hours a week.* Spring semester.

Ag 5. Field Crops.—Lectures and recitation work on the history, distribution, uses, chief characteristics, and adaptability of the principal farm crops; the best methods of producing them, including crop rotations, preparation of the land, fertilizing and seeding; a study and treatment of the injurious insects and diseases affecting them, and the harvesting, marketing, and storing of crops. *Two hours a week.* Fall semester.

Ag 5a. Laboratory Course in Field Crops.—To be taken with Ag 5. † *Two hours a week.* Fall semester.

Ag 6. Advanced Agronomy.—Elective, advanced work for those who have completed the required work of the first three years. Lectures and recitations along lines of Experiment Station work; the application of plant breeding to the improvement of farm crops. The student will carry out original investigations along some chosen line under the direction of the instructor. *Two hours a week.* Fall semester.

Ag 6a. Laboratory Advanced Agronomy.—To be taken with Ag 6. † *Two hours a week.* Fall semester.

Ag 7. Advanced Agronomy.—A continuation of course 6. *Two hours a week.* Spring semester.

Ag 8. General Agriculture.—A history of agriculture from the earliest times, including that of the Jews, Egyptians, and Romans, to the present day; the beginning of British agriculture, and the development of modern agriculture with especial reference to that of England, Germany, France, and other foreign countries; the agriculture of the United States, its influence on social conditions, its relation to the State and Nation; the importance of our leading products, and their effect on the world's commercial life; the agriculture of different sections. Rural life and rural development. Lectures supplemented by illustrative material. Elective and open to all students of the University. *One hour a week.* Spring semester.

Ag 9. Soil Fertility.—A laboratory course in soil chemistry and soil fertility embracing experiments to determine the relative fertility of different soils. Experiments such as are conducted in the laboratories of the United States Department of Agriculture will be carried out. The preparation and testing of reagents used in this work, a course based on Wiley's Agricultural Analysis, the methods adopted by the Association of Agricultural Chemists, and Hopkins & Pettit's Laboratory Manual for Soil Fertility. Elective for juniors and seniors. † *Two hours a week.* Spring semester.

Ag 10. Seminary.—A study of current agricultural literature and topics, assigned readings from which abstracts and reports are to be given before the class. Elective. † *Two hours a week.* Spring semester.

Ag 11. School Gardening.—A course for those taking the teachers' course in agriculture. It consists of planting seed and propagating plants in the greenhouses in preparation for the garden work; and the laying out, planting, and caring for a plot of land arranged as a school garden. * *Three hours a week.* Spring semester.

ANIMAL INDUSTRY

PROFESSOR CAMPBELL

An 1. ANIMAL BREEDING.—A study of the market and breed types of dairy cattle, beef cattle and sheep; their history, development, breed characteristics and economic values. The work is given by lectures and text-books. *Two hours a week.* Spring semester.

An 2. LIVE STOCK JUDGING.—Practice in the use of score cards and judging, handling and management of dairy cattle, beef cattle and sheep. This course is taken in conjunction with An 1. † *Two hours a week.* Spring semester.

An 3. ANIMAL BREEDING.—A study of the market and breed types of swine and horses, their history, development, breed characteristics and economic values. Lectures and recitations on the principles of breeding. *Two hours a week.* Fall semester.

An 4. LIVE STOCK JUDGING.—Practice in the use of score cards, and judging, handling and management of swine and horses. This course is taken in conjunction with An 3. † *Two hours a week.* Fall semester.

An 5. ANIMAL FEEDING.—Food requirements of different kinds of animals; composition of foods and the nutrients furnished by them; feeding formulas; calculating rations; valuation of foods; pasturing, soiling and methods of feeding. *Two hours a week.* Fall semester.

An 6. DAIRYING.—A study of the Babcock test; the determination of acidity and use of lactometer. Given by lectures, text-book and practice in dairy laboratory. † *Two hours a week.* Fall semester.

An 7. DAIRYING.—Lectures and recitations upon the composition and formation of milk; its production and aeration, pasteurization, separation, manufacture into butter and marketing. *Two hours a week.* Spring semester.

An 8. LABORATORY DAIRYING.—Practice in handling and testing milk and cream, for butter-fat, acidity and solids; ripening cream; making butter and operating dairy machinery. This must be in conjunction with or preceded by An 6 and An 7. † *Seven hours a week for six weeks.* Spring semester.

An 9. Poultry Breeding.—A study of the types and breeds of poultry, their history, development, breed characteristics and economic values. *Two hours a week.* Elective to seniors. Fall semester.

An 10. Poultry Management.—A study of the construction of houses; incubation; brooding, feeding chicks; feeding for eggs; preparation for and methods of marketing. *Two hours a week.* Elective to seniors who have taken An 9. Spring semester.

An 11. Advanced Animal Indutry.—A study of the breeds, feeding or dairying. Elective for those who have completed An 1 to An 8 inclusive. † *Two hours a week.* Fall semester.

An 12. Advanced Animal Industry.—A continuation of An 11. *Two hours a week.* Spring semester.

ART

Professor Huddilston offers certain courses in art which are described in connection with the department of Greek. See page 89.

BIBLIOGRAPHY

Professor Jones

Bb 1. Bibliography.—Origin of the alphabet; development of writing; inscriptions; manuscripts; invention of printing; early printed books; modern bookmaking; bookbinding and the care of books; library processes and aids; public documents; periodicals; libraries, ancient and modern. A lecture course, with collateral reading and reference work. *One hour a week.* Spring semester.

Three lectures are given on The Library and Its Use; Classification and the Catalog; and Reference Books and Their Use. Required of all freshmen. Fall semester.

BIOLOGICAL AND AGRICULTURAL CHEMISTRY

Professor Merrill

Bc 1. Biological Chemistry.—Lectures and recitations on the composition of the plant; the source and assimilation of plant food; the composition of the animal body and of food materials; the chemical changes involved in the digestion and assimilation of food; the chemistry

of milk and dairy products; and the chemical processes and methods of investigation by which these subjects are studied. *Five hours a week.* Fall semester.

Bc 2. Laboratory Biological Chemistry.—A study of the proteids, fats, and carbohydrates; the digestive enzymes; blood and other tissues of the animal body; bile, milk, and other secretions. A continuation of course 1. *Three hours a week.* Spring semester.

Bc 3. Agricultural Chemistry.—A course in the chemistry of soils and fertilizers. It includes the supply, composition, care, and use of farm manures; the origin, composition, preparation, and use of commercial fertilizers; and the general considerations which pertain to soil fertility. *Five hours a week.* Spring semester.

Geology.—A study of the earth's history and development, with especial attention to structural and physiographical geology. *Three hours a week.* Fall semester.

BIOLOGY

Professor Drew; Professor Russell; Professor Chrysler; Dr. Riddle (Summer Term); Mr. Edwards; Mr. Ridgway

The subjects given below are arranged numerically, but not in the order in which it is best for students to pursue them. It is desirable that all intending to take biology should begin with courses 1 and 2.

Bl 1. General Biology.—This course is devoted to the study of the general principles governing the activities of living things, both plants and animals. It is open to all students, and should form the basis for other work in either zoölogy or botany. It is to be taken in connection with course 2. *Two hours a week.* Fall semester.

Bl 2. Laboratory Biology.—To be taken in connection with course 1. † *Two hours a week.* Fall semester.

Bl 3a. Mammalogy.—The course is devoted to the habits, relationship, and geographical distribution of members of the group. Special attention is given to their adaptations for the lives they lead. Open to all students. *Two hours a week.* Fall semester.

Bl 3b. Ornithology.—A course on the habits, relationship, and geographical distribution of birds. Attention is given to the economic

importance of birds of the State. Open to all students. *Two hours a week.* Spring semester.

Bl 4. Bacteriology.—A lecture course for all students who are unable to take a laboratory course. *One hour a week.* Fall semester.

Bl 5. Zoölogy (Invertebrate Animals).—Representatives of the invertebrate groups of animals are studied in the laboratory, class-room, and field, where attention is given to their habits, comparative anatomy, and to some extent to their embryology and classification. This course is to be taken in connection with course 6. Courses 1 and 2 are required as a preparation. *Two hours a week.* Spring semester.

Bl 6. Laboratory Zoölogy.—To be taken in connection with course 5. † *Three hours a week.* Spring semester.

Bl 7. Zoölogy (Vertebrate Animals).—A continuation of course 5. Types of the Vertebrata are studied and their structures compared. A few weeks are devoted to the embryology of the frog. This course is to be taken in connection with course 8. It must be preceded by courses 1 and 2. *Two hours a week.* Fall semester.

Bl 8. Laboratory Zoölogy.—To be taken in connection with course 7. † *Four hours a week.* Fall semester.

Bl 9. Physiology.—Attention is given to the physiological activities of the human body, with enough anatomy to render the physiological discussions intelligible, and enough hygiene to serve as a guide for the intelligent care of the body. Open to all students. *Two hours a week.* Fall semester.

Bl 10. Entomology.—Insects are studied with special reference to their habits, life-histories, and structure. Attention is given to their economic importance, and the methods of controlling them. This course is to be taken in connection with course 11. Courses 1 and 2 are required as a preparation. *Two hours a week.* Spring semester.

Bl 11. Laboratory Entomology.—To be taken in connection with course 10. † *Four hours a week.* Spring semester.

Bl 12. Advanced Physiology.—Intended for those who already have an elementary knowledge of general biology and physiology. This course

is to be taken in connection with course 13 and must be preceded by courses 1 and 2 and by elementary physiology. *Three hours a week.* Spring semester.

Bl 13. Laboratory Physiology.—To be taken in connection with course 12. It consists of anatomical study and simple experiments. † *Four hours a week.* Spring semester.

Bl 14. Advanced Zoölogy.—This course offers an opportunity for special zoölogical work along lines best suited to the future plans of the student. It may consist of field work, laboratory work, or reading, or a combination of all three. *The time varies, and the work may be continued a number of semesters.* Fall and spring semesters.

Bl 15. Veterinary Science.—A combined lecture and laboratory course dealing with the anatomy and physiology of our domestic animals. *Two hours a week.* Spring semester of odd years.

Bl 16. Veterinary Science.—Lectures, demonstrations, and clinics, illustrated by models, natural preparations, and living animals. *Three hours a week.* Spring semester of even years.

Bl 17. Bacteriology.—An elementary laboratory course, including the preparation of culture media and a critical study of the morphological and biological characteristics of a few typical bacteria. Students in agriculture give especial attention to the bacteriology of the dairy. † *Six hours a week.* Spring semester.

Bl 18. Animal Histology.—A laboratory course in normal animal histology. Starting with perfectly fresh material, the work consists in the preparation, hardening, embedding, cutting, staining, and mounting of the various normal tissues and organs of animals. † *Four hours a week.* Spring semester.

Bl 19. Advanced Bacteriology.—For students who have taken Bl 17. † *Six hours a week.* Spring semester.

Bl 20. Organic Evolution.—Some of the more important facts on which the theory is based are presented for consideration, and subjects for individual reading and essays are assigned. Open to all students. *One hour a week.* Spring semester of odd years.

Bl 21. General Botany—Phanerogams. The course includes a brief consideration of the fundamental principles of the structure, functions, habits and systematic relations of the seed plants. This course is to be taken in connection with course 22, and should follow courses 1 and 2. *Two hours a week.* Spring semester.

Bl 22. Laboratory Botany.—To be taken in connection with course 21. † *Four hours a week.* Spring semester.

Bl 23. General Botany—Cryptogams.—Type forms of algae, fungi, lichens, liverworts, mosses, and ferns are studied in the laboratory and in the field. Attention is given to their structures, life histories, and habitats, as well as their relations to the higher forms of plants. This course must be preceded by courses 1 and 2, and should be preceded by courses 21 and 22. *Two hours a week.* Fall semester.

Bl 24. Laboratory Botany.—To be taken in connection with course 23. † *Four hours a week.* Fall semester.

Bl 25. Plant Histology.—The microscopic structure of the higher plants; the cell; the various tissues; the root, stem, leaf, and spore-bearing organs; the adaptations of plants to external conditions considered from the standpoint of structure; killing, staining and mounting of plant tissues. This course is to be taken in connection with course 26, and must be preceded by courses 21 and 22. *Two hours a week.* Fall semester.

Bl 26. Laboratory Plant Histology.—To be taken in connection with course 25. † *Four hours a week.* Fall semester.

Bl 27. Plant Physiology.—The plant is considered from the standpoint of its activities; absorption and transport of raw materials; manufacture, transport and storage of food; growth, movement in response to stimuli. This course must be preceded by courses 2 and 22, and may with advantage follow courses 23, 24, 25 and 26. To be taken in connection with course 28. *Two hours a week.* Spring semester.

Bl 28. Laboratory Plant Physiology.—To be taken in connection with course 27. † *Four hours a week.* Spring semester.

Bl 29. Agricultural Botany.—This course deals with the plants of the farm and consists of three parts. 1. Seeds.—Structure, functions,

dispersal, and identification. Buying, selling, testing, and identification. 2. Weeds.—Origin and distribution; their benefits, disadvantages, and methods of eradication; systematic study of Maine weeds. 3. Grasses. —Origin and distribution of the important grasses; their duration, reproduction, and pollination; identification of species. This course must be taken in connection with course 30. Bl 22 and Bl 23 are prerequisites. *Two hours a week.* Fall semester.

Bl 30. Laboratory Agricultural Botany.—To be taken in connection with course 29. † *Two hours a week.* Fall semester.

Bl 31. Plant Pathology.—Attention is given to the diseases of plants resulting from the attacks of fungi and those induced by unfavorable environment. The causes, symptoms, and treatment of the common diseases of familiar plants are considered. This course must be taken in connection with course 32. *One hour a week.* Given in the spring semester of odd years.

Bl 32. Laboratory Plant Pathology.—To be taken in connection with course 31. † *Two hours a week.* Spring semester.

Bl 33. Elementary Botany.—Studies in the structure and functions of the organs of plants. Agents of pollination, and the distribution of seeds and fruits. Exercises in plant analysis, and the identication of species in the field. To be taken in connection with course 34. Open to students who have had neither preparatory botany nor courses 1 and 2. *One hour a week.* Spring semester.

Bl 34. Laboratory Elementary Botany.—Practical studies of seed plants in the laboratory and in the field. To be taken in connection with course 33. † *Four hours a week.* Spring semester.

Bl 35. Pharmaceutical Histology.—Exercises on the use of the microscope; the magnification of objects, and microscopic measurements. A study of cells and tissues, and food products found in them; followed by exercises in the detection of the common adulterants of familiar drugs. To be taken in connection with course 36. Open to students who have taken courses 33 and 34. *One hour a week.* Fall semester.

Bl 36. Laboratory Pharmaceutical Histology.—To be taken in connection with course 35. † *Four hours a week.* Fall semester.

Bl 37. Advanced Botany.—This course offers an opportunity for special work in botany along lines best suited to the future plans of the student. It may consist of field work, laboratory work, or reading, or a combination of all three. *The time varies and the work may be continued a number of terms.* Fall and spring semesters.

Bl 38. Forest Botany.—A study of plant life in the forest. Particular attention will be given to the structure, function, and relations of the organs of trees to their environment; the development of tissues of woody plants and their diagnostic value; a systematic account of the trees of the United States, with special reference to those of commercial value. Open to those who have taken Bl 21 and 22; to be taken in connection with Bl 39. *Two hours a week.* Fall semester.

Bl 39. Forest Botany.—Field and laboratory work. Excursions to identify the trees and shrubs about Orono, including the collection, preparation, and classification of a forest herbarium. Microscopic work in the study of morphological elements of trees, and the making of a bud key. † *Four hours a week.* Fall semester.

Bl 40. Forest Botany.—A continuation of course 38. To be taken in connection with course 41. *Two hours a week.* Spring semester.

Bl 41. Forest Botany.—Field and laboratory work. A continuation of course 39. † *Four hours a week.* Spring semester.

Bl 42. Forest Zoölogy.—This course deals with the animals that are of economic importance in forests. A portion of the time is given to the study of economic problems with which mammals and birds are concerned and the remainder to the study of the habits, life-histories and methods of control of injurious and beneficial forest insects. *Two hours a week.* Fall semester.

Summer Term

1. Field Botany.—This course will deal with the kinds, habits, and habitats of plants about the University, including short excursions to several outlying regions for collecting and identifying species in field and forest. Attention will also be given to methods of pollination, modes of migration, association and mutual benefits of flowers and insects, and other factors of environment such as light, heat, soil, water, gravity, and the effects of other plants. There will be a few lectures, some reference reading, and a small amount of laboratory work confined mostly to rainy days.

2. Laboratory Botany.—A course designed primarily for teachers and dealing with laboratory methods. Exercises will be given in collecting and preserving material of different kinds in different ways. Considerable time will be devoted to life, based on the phenomena of absorption and movement of experimental work on the physics and physiology of plant solutions, transpiration, respiration, carbon assimilation, and reproduction. Attention will also be given to the teaching of botany in secondary schools.

CHEMISTRY

Professor Aubert; Mr. Seymour; Mr. Burgess (Summer Term); Mr. Clayton; Mr. Washburn

Ch 1. General Chemistry.—Recitations and lectures on the general principles of chemistry, illustrated by charts, experiments, etc. To obtain credit for this course, it must be accompanied by course 3, and followed by courses 2 and 4, unless a special excuse is obtained. The text-book is Remsen's Chemistry. *Two hours a week.* Fall semester.

Ch. 2. General Chemistry.—A continuation of course 1. *Three hours a week.* Spring semester.

Ch. 3. Laboratory Chemistry.—Practical work to accompany course 1. The text-book is Keller and Smith's Laboratory Experiments. † *Two hours a week.* Fall semester.

Ch 4. Laboratory Chemistry.—A continuation of course 3, to accompany course 2, with elementary qualitative analysis for those who advance far enough. † *Two hours a week.* Spring semester.

Ch 5. Advanced Inorganic Chemistry.—Lectures and recitations, illustrated by specimens. The text-book is Jones's Principles of Inorganic Chemistry. *Two hours a week.* Fall semester. No credit is given unless course 6 is taken, except by special arrangement. Open to students who have taken courses 1, 2, 3, and 4.

Ch 6. Advanced Inorganic Chemistry.—A continuation of course 5. *Three hours a week.* Spring semester.

Ch 7. Elementary Organic Chemistry.—The marsh gas series. Lectures and recitations, illustrated by specimens. The text-book is Remsen's Organic Chemistry. *Three hours a week.* Fall semester.

This course must be followed by course 8, and preceded by courses 1, 2, 3, 4, 5 and 6, except for those especially admitted.

Ch 8. Elementary Organic Chemistry.—The unsaturated compounds and the benzene series. A continuation of course 7. *Two hours a week.* Spring semester.

Ch 12. Chemical Preparations.—The preparation and purification of typical organic and inorganic substances. Open to students who have taken courses 1, 2, 3, 4, 5, 6, 7, and 8. Text-book, Aubert's Organic and Inorganic Preparations. *Five hours a week.* Fall semester.

Ch 13. Descriptive Mineralogy.—The text-book is Moses and Parson's Elements of Mineralogy. *Three hours a week.* Spring semester.

Ch 14. Qualitative Analysis.—A laboratory study of the chief elements and their derivatives with a view to a clear understanding of their properties. Supplemented by class room work. The text used is Medicus's Qualitative Analysis. *Not less than † eight hours per week, except by special arrangement.* Fall semester. Open to students who have taken courses 1, 2, 3, and 4, except for students in the short pharmacy course. It is generally advised that course 5 be taken with this course, and it must be followed by course 15.

Ch 15. Qualitative Analysis.—A continuation of course 14, with the application of analytical methods to the determination of unknown substances of increasing complexity. Elementary analysis by means of the spectroscope is given. Course 6 is usually an acompanying study, except for students in the short pharmacy course. *Time, the same as course 14.* Spring semester.

Ch 16. Quantitative Analysis.—Gravimetric determinations. The text is Appleton's Quantitative Chemical Analysis. *Not less than † eight hours per week, except by special arrangement.* For satisfactory preparation, the student should have taken courses 1, 2, 3, 4, 14, and 15; and he should add courses 18 and 19.

Ch 18. Quantitative Analysis.—Analysis of complex alloys, minerals, etc. The text used is Clows and Coleman's Quantitative Chemical Analysis. *Not less than † eight hours per week, unless by special arrangement.* Fall semester. Open to students who have taken course 16 and its requirements.

Ch 19. Volumetric Analysis and Assaying.—Acidimetry, alkalimetry, oxydimetry; gold and silver assaying. The text-book used is Schmiff's Essentials of Volumetric Analysis. *Time* and general requirements the same as for course 18.

Ch 20. Agricultural Analysis.—The analysis of fodders, fertilizers, milk, and other products. The methods are those recommended by the Association of Official Agricultural Chemists. Except in special cases, the *time* and requirements are the same as for cou- e 18.

Ch 21. Toxicology and Urinalysis.—The determination of the more common poisons; the analysis of urine. Text, Aubert's Urinalysis and Toxicology. *Time,* and general requirements, the same as for course 18.

Ch 22. Thesis Work.—The thesis must embody the result of original work in analysis or research. † *Fifteen hours a week for eleven weeks.* Spring semester. Open to students who have taken courses 1, 2, 3, 4, 5, 6, 7, 8, 12, 14, 15, 16, 18, 19, 20, 21, 23, 24 and 28.

Ch 23. Organic Chemistry.—An advanced course. Text-book, Joannis's Cours de Chimie, Vol. III. *Three hours a week.* Fall semester.

Ch 24a. Industrial Chemistry.—General processes of technical chemistry, and selected topics, including the principal manufactured products of special interest. Lectures and recitations. The text-book is Thorp's Outlines of Industrial Chemistry. *Two hours a week.* Fall semester. Open to students who have completed courses 5, 6, 7, and 8.

Ch 24b. Industrial Chemistry.—A continuation of course 24a. *Two hours a week.* Spring semester.

Ch 25a. Technical Analysis.—An advanced course in analysis of ores and industrial products. Open to students who have completed courses 16, 18, 19, and their requirements. † *Five hours a week.* Fall semester.

Ch 25b. Technical Analysis.—Organic technical products, and advanced mineral analysis. † *Five hours a week.* Spring semester.

Ch 26. Physical Chemical Methods.—The determination of molecular weights by the vapor density, boiling point, and freezing point

methods; the use of the refractometer and the polariscope. † *Five hours a week.* Spring semester.

Ch 28. Dyeing. The practical application of dyes to cotton, wool and silk. † *Fifteen hours a week for two weeks.* Spring semester.

Ch 29. Metallurgy.—The chemistry of the metals. Occurrence and methods of extraction. Properties of the metals and their alloys. *Two hours per week.* Fall semester.

Ch 31. Chemical Equations.—Principles governing chemical reaction; their application to equations; advanced equation writing; oxidation and reduction. The text-book is Prescott and Johnson's Qualitative Chemical Analysis. *Two hours a week.* Spring semester.

Ch 32. Physical Chemistry.—This course is devoted to the study of the general principles of physical chemistry. Lectures and recitations. *Two hours a week.* Spring semester of even years. Open to students who have completed Ch 6.

Summer Term

1. An elementary laboratory course covering the work required for entrance to the university.
2. A laboratory course based upon the work of the freshman year.
3. Advanced laboratory courses adapted to the needs of students registering for them.
4. A lecture course covering the elementary problems of chemistry so far as time permits.

CIVICS

Professor Rogers

Professor Rogers's courses will not be given this year

CIVIL ENGINEERING

Professor Boardman; Professor Brown; Mr. Bean; Mr. Johnstone; Mr. Lord

Ce 1a. Plane Surveying.—A course on the general principles of plane surveying; instruments, their adjustments and uses; the variation of the magnetic needle, and the determination of the true north; direct leveling; land survey computations. The text-book used is Breed and Hosmer's, The Principles and Practice of Surveying. *Three hours a week. Last twelve weeks.* Fall semester.

Ce 1b. Plane Surveying.—A course similar to 1a, given to students in the mechanical and electrical engineering courses. *Two hours a week.* Fall semester.

Ce 2a. Field Work in Surveying.—The use of the chain, compass, transit, and level. This course is given before the student has received class room instruction, and is designed to make him familiar with the uses of the instruments, such as running lines, turning angles, reading verniers and rods, etc. * *Six hours a week. First six weeks.* Fall semester.

Ce 2b. Plotting.—This course consists chiefly of map drawing from field notes, by the different methods in common use. * *Four hours a week. First twelve weeks.* Spring semester.

Ce 2c. Field Work in Surveying.—A continuation of course 2a. This course consists of original surveys, problem work, adjustment of instruments, note keeping, etc. The text-book used is Pence and Ketchum's Surveying Manual. * *Six hours a week. Last six weeks.* Spring semester.

Ce 2d. Field Work in Surveying, and Plotting.—A short course given to students in the mechanical and electrical engineering courses. This course consists of the main principles contained in courses 2a, and 2b. * *Three hours a week. First nine weeks.* Fall semester.

Ce 3a. Railroad Curves.—The theory of railroad curves, switches and turnouts. The text-book used is Allen's Railroad Curves and Earthwork, together with Field and Office Tables, by the same author. *Three hours a week. First twelve weeks.* Spring semester.

Ce 3b. Earthwork.—A continuation of course 3a on the methods of setting slope stakes and of calculating earthwork. *One hour a week.* Fall semester.

Ce 4a. Railroad Field Work.—This course consists of practice in running in railroad curves. A general application of the theories of course 3a. † *Six hours a week. Last six weeks.* Spring semester.

Ce 4b. Railroad Field Work.—The survey of a railroad about three miles in length. The preliminary and location surveys are made, including running in the curves, obtaining the topography, establishing the

grade, and setting the slope stakes. **Six hours a week. First nine weeks.* Fall semester.

Ce 4c. Railroad Office Work.—The office work of mapping the notes taken in course 4b, including the calculation of the earthwork. **Six hours a week. Last nine weeks.* Fall semester.

Ce 5. Highway Engineering.—The location, construction, and improvement of country roads under different conditions of soil, climate, and traffic. The construction and maintenance of the different pavements on city streets. Lectures and recitations. The text-book used is Judson's City Roads and Pavements. *Two hours a week.* Fall semester.

Ce 6. Drawing.—This course includes topographical drawing, lettering and tracing; stereotomy, giving the application of the methods of descriptive geometry to the preparation of drawings for arches, retaining walls, abutments, bridge piers, etc. **Six hours a week.* Spring semester.

Ce 8. Sanitary Engineering.—Sewerage systems; drainage and sewerage of towns; sewage disposal; sewage treatment; water purification; sanitation and the public health. The text-book used is Folwell's Sewerage. Required of students electing Option 1. *Two hours a week.* Spring semester.

Ce 9a. Advanced Surveying.—This course consists of lectures on the theory of base line measurement, triangulation, precise leveling, topographical surveying and the use of the plane table, and is a preparation for course 9b. *One hour a week.* Spring semester.

Ce 9b. Advanced Surveying.—This course consists of the practical application in the field of the principles given in course 9a. The work is given during the two weeks following commencement, and counts as 2-5 credit.

Ce 10. Hydraulics.—Fundamental data; hydrostatics; theoretical hydraulics; instruments and observations; theoretical and actual flow through orifices, weirs, tubes, pipes and conduits; dynamic pressure of water. The text-book used in this course is Merriman's Treatise on Hydraulics. *Three hours a week.* Spring semester.

Ce 11. Hydraulic Field Work.—The measurement of the flow of rivers is illustrated by the use of the current meter, and various forms

of floats. Trips are made to the United States Geological Survey gaging station, located on the Penobscot river between Howland and West Enfield, where discharge measurements are made, where, at this time of year, a discharge of from 4,000 to 10,000 cubic feet per second is usually found. The data thus obtained is used together with that obtained from the Survey to plot the rating curve, etc. The measurements taken are reported to the Survey. The charge for this course is $5.00. † *Four hours a week.* Fall semester.

Ce 12. STRUCTURES.—A continuation of course 21. The theory of stresses in framed structures, including the plate girder, bridge trusses, and roof trusses; the principles of designing. The object of this course is to train the student in the application of the principles of mechanics to the design of structures. *Three hours a week.* Fall semester.

Ce 13a. STRUCTURES.—A continuation of course 12. This course includes a study of the higher types of structures such as drawbridges, cantilever bridges, suspension bridges, arches, and steel buildings. The text-book used is Merriman and Jacoby's Roofs and Bridges Vol. IV. *Three hours a week.* Spring semester.

Ce 13b. GRAPHIC STATICS.—This course consists of class and drawing room work in the graphical determination of shear and bending moment, and the analysis of bridge and roof trusses by the graphical method. *Two hours a week.* Spring semester.

Ce 14. DESIGNING.—This course takes up the design for some of the common types of steel structures, and the preparation of the shop drawings. † *Twelve hours a week.* Fall semester.

Ce 15. DESIGNING.—A continuation of course 14. † *Six hours a week.* Spring semester.

Ce 16. HYDRAULIC ENGINEERING.—Rainfall, evaporation, and stream flow. The development and utilization of water power. The development of the modern turbine. This course is given by lectures and recitations, the text-books used being Hoyt and Grover's River Discharge, and Merriman's Hydraulics. Required of students electing Option 1. *Two hours a week.* Fall semester.

Ce 17. HYDRAULIC ENGINEERING.—A continuation of course 16. *Two hours a week.* Spring semester.

Ce 19. Railroad Engineering.—A course discussing the economics of railroad location and construction; estimate of traffic; operating expenses; rolling-stock; track; distance; curvature; grades. The text-book used is Webb's Economics of Railroad Construction. Required of students electing Option 2. *Two hours a week.* Spring semester.

Ce 20. Masonry Construction.—A course including the discussion of building stone, cements and their tests, mortar, concrete, piles, foundations, pneumatic caissons, open caissons, bridge piers and abutments. Reinforced concrete. Lectures and recitations. The text-book used is Baker's Treatise on Masonry Construction. *Two hours a week.* Fall semester.

Ce 21. Structures.—The theory of the simple beam; loads; reactions; vertical shear; shear; bending moment; influence lines. The object of this course is to give the student a drill in finding vertical shear and bending moment under different systems of loadings, and to familiarize him with the use of steel hand books, the moment diagram, different tables, and the slide rule. The text-book used is Grover and Boardman's Notes on Beams and Simple Framed Structures. *Two hours a week.* Spring semester.

Ce 22. Foundations.—Building stones; manufacture of cement; tests of cement. Mortar; concrete, both plain and reinforced. This is a course of lectures given to students in the mechanical and electrical engineering courses. *One hour a week.* Fall semester.

Ce 23. Hydraulics.—A short course which includes the main principles given in course 10. Given to students in the mechanical and electrical engineering courses. The text-book used is the same as that used in course 10. *Two hours a week.* Fall semester.

Ce 24a. Railroad Engineering.—A map reconnaissance for a railroad about ten to fifteen miles in length, where the theories of course 19 are applied. A profile is made, grades established and drainage areas calculated. Culverts, rails, switch points, frogs, and ties are designed, and the layout of a railroad yard made. Required of students electing Option 2. † *Four hours a week.* Fall semester.

Ce 24b. Railroad Engineering.—A continuation of course 24a. † *Two hours a week.* Spring semester.

Ce 25. Railroad Engineering.—Lectures and recitations on the methods and materials of railroad construction. Roadbed; track; street crossings; signals and interlocking; track work and maintenance. The design and operation of yards and terminals. The text-book used is Tratman's Railway Track and Track Work. Required of students electing Option 2. *Three hours a week.* Spring semester.

Ce 26. Cement Testing.—This course consists of laboratory work for the purpose of making the regulation commercial tests upon different samples of cement. A laboratory fee sufficient to cover the cost of materials used is charged. This course is given in conjunction with Me 25, Testing, and is required of students in mechanical engineering in the fall semester and of students in civil engineering in the spring semester. Time variable.

ECONOMICS AND SOCIOLOGY

Professor Sprague

Ec 1. Political Economy.—This course deals with the principles and theory of modern economic thought, production and consumption of wealth, values, commerce and shipping, tariff problems and tariff history, labor problems, trusts and monopolies, and other economic questions. A series of lectures will be given on economic history. Text-book and open discussions with collateral readings. *Five hours a week.* Fall semester.

Ec 2. Money, Banking, and Public Finance.—This course is given to a study of the general history of money, financial history of America, problems of the single and double standards, banking in Europe and America, crises and depressions, federal and local taxation and other financial interests. Text-book and lectures. *Five hours a week.* Spring semester.

Ec 3. Sociology.—This course is devoted to anthropological evolution, races and racial characteristics, history of the family, religious organisms, the State and property, and such current social problems as divorce, criminality and prison reform, poverty and its relief, etc. General sociological theory will occupy the last few weeks. The course is open to those who have taken political economy, and to others by special permission. *Five hours a week.* Fall semester.

Ec 4. Practical Social Reform.—Socialism, communism, and communistic settlements, anarchy, nihilism, European systems for insurance

of wage earners, trade-union relief associations, and other efforts providing against misfortune and old age. Lectures and readings. Open to those who have taken Ec 3, and to others by special permission. *Five hours a week.* Spring semester.

Ec 5. International Law.—The principles, history, and prominent "cases" of international law constitute the main part of the work. American diplomacy and important foreign treaties will be given much attention. Text-book, discussions, and lectures. *Three hours a week.* Fall semester.

Ec 6. Business Law.—This course aims to acquaint the student with those legal principles and practices which are essential to a business life and with which every active citizen should be familiar; rights, contracts, agency, partnerships and corporations, bailments, guaranty, insurance, etc. Lectures with readings. *Three hours a week.* Spring semester.

Ec 7. Governments of Europe.—A brief review of the development and ancient types of government, followed by a detailed comparative study of modern European governments, their politics and national problems. A lecture course with collateral readings. *Two hours a week.* Fall semester.

Ec 8. American Government.—The principles and interpretation of the Federal Constitution, history of political parties and critical periods of the country, to be followed by the problems of state and municipal governments. Lectures and readings. *Two hours a week.* Spring semester.

EDUCATION

Professor Davidson

Ed 1. History of Education.—From the Greeks to Rousseau. Ideals of education at each stage of development; their sources, and modification through the intellectual life and convictions of the people; organization of instruction and the results obtained. *Three hours a week.* Fall semester.

Ed 2. History of Education.—Course 1 continued,—the development of education traced down to the present time. *Three hours a week.* Spring semester.

Ed 3. Organization and Administration.—Growth of present conceptions of education in the United States; organization of education in the different states; also in Germany, France, and England; comparative study of education in three typical states—Massachusetts, New York, and California—and special study of the school system of Maine. *Three hours a week.* Fall semester.

Ed 4. Organization and Administration Continued.—Problems within the state: town schools and city schools; duties of all officers; certification of teachers and supervision; financial support; defects and excellences of present organization. Problems within the school: powers and duties of the teachers; programs and courses of study; government, and student activities; grading and backward pupils; class and individual instruction. *Three hours a week.* Spring semester.

Ed 5. Foundations of Education.—Avenues through which knowledge reaches the child and methods of effective approach. Training in analysis, synthesis, and reasoning; inculcation of habits of attention, discrimination, judgment; methods of imparting instruction by topical recitation, question, and exposition; the use of examination, note-book, library, and laboratory methods. *Three hours a week.* Fall semester.

Ed 6. Special Methodology.—All high school teachers, principals, and superintendents should be specialists in some high school subject. After conference with his major instructor, a course of study, reading, and practice will be mapped out for each student in the methods most applicable in his specialty. *Three hours a week.* Spring semester. Open to those only who have taken Course 5.

Ed 7. School Hygiene.—Habits for healthful living; hygienic conditions in home and school; ventilation and sanitation; habits of study in school and at home; physical examination and training; nutrition and school luncheons; construction of school buildings. *Two hours a week.* Spring semester. Open to advanced and graduate students, only.

Ed 8. Child Study.—The physical child. Order of development of the mental powers; adolescence; adaptation of studies to the child. *Two hours a week.* Spring semester. Open to those only who have taken Course 5.

Summer Term

The following courses are offered for election; the three elected by the greatest number of students will be given:

1. The History of Education. The development of schools below the grade of the University, beginning with the Renaissance and the Protestant Reformation.

2. Educational Foundations. Among the topics discussed will be the development of mental ability, habit, inhibitions, the will, interest, attention, fatigue, the economy of energy, etc. Readings will be assigned to accompany the lectures.

3. Comparative Studies in School Law. This course is intended primarily for those who expect to serve the schools in an administrative capacity, as principals, superintendents, or supervisors. The solutions which different states offer for problems most vital to the public schools will be compared and discussed. Each member of the class will be expected to provide himself with the school law of some state and to speak for that state on all questions arising for discussion.

4. Modern English Grammar, and Methods in Teaching the same. In every subject except English grammar, a teacher is expected to know more than she teaches. In this course special study will be given to those constructions in prose text that are omitted in the handbooks of grammar. The course will also include a discussion of the different parts of speech and of the syntactic relations, to discover principles of classification where grammars disagree. The functions of prepositions, the relations expressed by infinitives and noun clauses, with their analogues in noun and phrase constructions, will be examined, and also the genesis of noun and adverbial clauses. Advanced works for reference will be provided, but all should bring for purposes of comparison such handbooks of grammar as they possess.

5. A seminar meeting for consultation concerning methods of teaching English in the grades and secondary schools will be held once a week, if desired, but no credit will be given for attendance at such meeting.

ELECTRICAL ENGINEERING

Professor Ganong; Mr. Wittig

Ee 1a. Elements of Electrical Engineering.—This course traces the development of electrical engineering from the practical application of laws studied in physics. The work is taken up by lectures, text-book, and problems. *Two hours a week.* Fall semester. Required of juniors in electrical engineering.

Ee 1b. Elements of Electrical Engineering.—A continuation of course Ee 1a, showing the application of fundamental principles to the construction of electrical machinery and to general engineering problems. *Three hours a week.* Spring semester. Required of juniors in electrical engineering.

Ee 2b. Laboratory Work.—Electrical measurements, and the operation and testing of direct current generators and motors. This course illustrates the practical application of the work given in courses Ee 1a and 1b. *Two hours a week.* Spring semester. Required of juniors in electrical engineering. The charge for this course is $2.00.

Ee 3a. Elements of Alternating Current Circuits.—A study of the conditions which arise in connection with the introduction of variable and alternating electric pressures, and the production of such pressures, measurements and calculations for the same. *Three hours a week.* Fall semester. Required of seniors in electrical engineering.

Ee 3b. Alternating Current Machinery.—A continuation of course Ee 3a, taking up the application of the fundamental elements of alternating currents to the design, construction, and operation of apparatus and machinery; the study of polyphase apparatus in the generation, transmission, distribution, and utilization of power. *Four hours a week for the first nine weeks.* Spring semester. Required of seniors in electrical engineering.

Ee 4a. Electrical Development.—A course on the design, construction, and cost of electro-magnets and clutches, electric heating apparatus, direct current generators and motors, and the general features of the design of alternating current machinery; the study of the insulation problem to meet the requirements of high electric pressures is also taken up, together with the discussion of modern electrical development. *Three hours a week.* Fall semester. Required of seniors in electrical engineering.

Ee 5a. Design of Electrical Machinery.—This course is given in the drawing room, and is the practical application of the work in course Ee 4a. Calculations are made for electro-magnetic devices, and for direct current generators, involving a knowledge of the fundamental electrical principles of design, the principles of mechanical design, cost of materials and cost of labor, and the use of the student's judgment to fit particular circumstances and financial conditions. *Four hours a week.* Fall semester. Required of seniors in electrical engineering.

Ee 5b. Design of Direct and Alternating Current Machinery.—A continuation of course Ee 5a. Drawing room work. *Four hours a week for thirteen weeks.* Spring semester. Required of seniors in electrical engineering.

Ee 6a. Laboratory Work.—A continuation of course Ee 2b, taking up the testing of direct current apparatus and machinery, and alternating current measurements; investigation of power plant equipments and electric lighting. *Four hours a week.* Fall semester. Required of seniors in electrical engineering. The charge for this course is $3.00.

Ee 6b. Laboratory Work.—A course showing the practical application of the work done in courses Ee 3a and 3b, and continuing the laboratory work of course Ee 6a, including the operating, testing, and experimental work with alternating current instruments, generators, motors, transformers, and rotary converters; and polyphase power measurements. *Four hours a week.* Spring semester. Required of seniors in electrical engineering. The charge for this course is $3.00.

Ee 7b. Electrical Engineering.—A course in general engineering applications and practical problems, such as will be met with after the student leaves college, applying all the work and training of the course and the technical ability of the student. *Four hours a week, last nine weeks.* Spring semester. Required of seniors in electrical engineering.

Ee 8b. Electrical Engineering Practice.—A course given for the expansion of laboratory work into the construction of laboratory apparatus and development of original ideas of the student; also for testing, repairing, or adjusting commercial electric plants. This course is designed and will be expanded to give the student an opportunity to apply his technical training and ability to actual engineering problems and difficulties. *Sixty-four hours during the senior year.* Required of seniors in electrical engineering.

Ee 9a. Thesis Work.—The designing of electrical apparatus or original research work in which the student is particularly interested; and a clear, complete report of what has been accomplished. The organization of the work and the carrying out of the same is left almost entirely to the student, and is a measure of his energy and ability as an engineer. *Fall semester and through the senior year, as arranged for.* Required of seniors in electrical engineering.

Ee 10a. Electrical Development and Application.—A course dealing with the fundamental electrical principles and their application to the production, distribution, and utilization of power from the standpoint of a mechanical engineer. *Three hours a week.* Fall semester. Required of seniors in mechanical engineering.

Ee 10b. Alternating Current Development and Application.—An elective course for seniors in mechanical engineering, which continues the work taken up in course Ee 10a. The fundamental elements of alternating current measurements and calculations are studied; also the operation of alternating current generators, motors, and polyphase apparatus is treated from a mechanical engineer's point of view. *Two hours a week.* Spring semester.

Ee 11a. Laboratory Work.—For mechanical engineers. Electrical measurements, and the operating and testing of direct current generators and motors, showing the practical application of the work taken up in course Ee 10a, and the work is arranged for the particular needs of the mechanical engineer. This course is open to chemical and civil engineering students who have previously elected one of the preliminary electrical courses. This course may be followed by the regular courses Ee 6a and 6b, by those wishing to become familiar with alternating current machinery. *Four hours a week.* Fall semester. Required of seniors in mechanical engineering. The charge for this course is $3.00.

Ee 12b. Electrical Transmission and Distribution of Power.—An elective course for seniors in civil engineering, taking up the elements of electrical measurement, the generation, transmission, and utilization of power; covering the electrical feature of water power development. *Two hours a week.* Spring semester.

ENGLISH

Professor Estabrooke; * Professor Thompson; Professor Wheeler; Mr. Prince; Mr. Daggett; Mr. Pearson

Two credits in English are required for graduation. Courses 3 and 4, which are prescribed for freshmen, give 1 1-5 credits. The remaining 4-5 credit is regularly obtained by taking courses 1 and 2; but students especially interested in other courses in English may, upon consultation

* Absent on leave.

with the instructors, make certain substitutions (see under courses 6, 7, 17, and 18). Course 1 is regularly taken during the freshman year and course 2 during the sophomore year; however, upon sufficient grounds, either course may be postponed for one year.

Eh 1a and 1b. Public Speaking.—The purpose of this course is to give the student a practical knowledge of the fundamental principles of effective public speaking. The first term's work consists in voice training by means of practice work in classes, reading aloud for interpretation, and the acquirement of ease in pose and gesture. During the second term the training thus acquired will be applied to the delivery of model public orations, and especially to speeches of the student's own composition. Special attention will be given to the correction of individual faults. Provided their other work is satisfactory, the eight students obtaining the highest grades in this course are chosen to compete in the sophomore prize declamations. During the year the sections will meet *once a week*. The assignment of sections is made by the instructor in the second week of the semester.

Eh 2a and 2b. English Composition.—This course—to be taken throughout the sophomore year—supplements the work of the freshman year by giving further practice in narrative, expository, and argumentative writing. *Monthly themes are required,* each containing from 1,000 to 1,200 words. There will be a conference on each theme.

Eh 3. English Composition and Rhetoric.—This course gives both theoretical and practical instruction. The theory is taught by class-room work based on Espenshade's Composition and Rhetoric. The practice is obtained by exercises written in the class-room, and by weekly themes. The themes are criticized in detail by the instructor, and those falling below the standard must be rewritten. In addition to the study of the text-book and the writing and rewriting of themes, certain outside reading from standard authors is required. This course is prescribed for freshmen. *Three hours a week.* Fall semester.

Eh 4. English Composition and Rhetoric.—Extended study of the forms of discourse—narration, description, exposition, and argumentation; construction of outlines, and practice in the different forms by exercises in the class-room and by weekly themes. The text-books are Cairn's Forms of Discourse and Lewis's Specimens of the Forms of Discourse. This course is prescribed for freshmen. *Three hours a week.* Spring semester.

Eh 5. Old English.—Elements of Old English grammar; reading of easy prose and poetry. Constant reference is made to the relation of old English to modern English and modern German. The text-book is Smith's Old English Grammar. *Three hours a week.* Given in the spring semester of even years.

Eh 6. English Composition and Literature.—One two-page theme a week, and occasional longer themes, in connection with the study of selections from English prose writings. Among the writings studied will be selections from Addison, Swift, Johnson, Goldsmith, and Burke. *Two hours a week.* Fall semester.

Eh 7. English Composition and Literature.—A continuation of course 6. Among the writings studied will be selections from Macaulay, Carlyle, Ruskin, Newman, Matthew Arnold, and Stevenson. *Two hours a week.* Spring semester.

Courses 6 and 7 are open to those who have taken courses 3 and 4; and students especially interested in courses 6 and 7 may, upon consultation with the instructor, substitute them for courses 1 and 2.

Eh 8. English Literature.—The text-book, Pancoast's Introduction to English Literature, is supplemented by frequent lectures, and by study in the library. A few masterpieces are studied in detail. Attention is given to historical and social conditions, and the students are required to prepare essays upon the characters and times studied. *Three hours a week.* Fall semester.

Eh 9. English Literature.—A continuation of course 8. The authors studied are chiefly Elizabethan dramatists. *Two hours a week.* Spring semester.

Eh 10. English Literature.—A continuation of course 9. Study of Elizabethan writers completed. Study of writers of the Restoration. *Two hours a week.* Fall semester.

Eh 11. American Literature.—Study of the most important American authors of the nineteenth century. The text-book is Bronson's American Literature. *Three hours a week.* Spring semester.

Eh 12. English Literature.—Study of the structure and qualities of the English novel. The text-book is Perry's Study of Prose Fiction. *Three hours a week.* Fall semester.

Eh 13. English Literature.—A continuation of course 12. In this course selections from English novelists are read critically, in order to determine the characteristic qualities of each. At least one entire work of a selected author is carefully studied. *Two hours a week.* Spring semester.

Eh 14. American Poets.—This course is designed to make the student acquainted with the more important American poets, especially with Poe, Bryant, Longfellow, Emerson, and Lowell. The text-book is Bronson's American Literature. *Three hours a week.* Given in the spring semester.

Eh 15. Victorian Poets.—Tennyson, Browning, Rossetti, and Arnold. A study of selected poems, together with readings in the works of these poets and of contemporary poets. *Two hours a week.* Fall semester.

Eh 17. Forensic Writing.—A course in the principles of written argumentation with a view to spoken debate. Lectures and written work. Open only to those who have taken courses 3 and 4, or an equivalent. *Two hours a week.* Fall semester.

Eh 18. Oral Debate.—A course in application of the principles of argumentation to spoken debate. Lectures and class-room work. Open only to those that have taken course 17, or an equivalent. This course is not given unless elected by at least eight students. *Two hours a week.* Spring semester.

Courses 17 and 18 may be substituted for courses 1 and 2.

Eh 19. Forms of English Poetry.—The study of the foot, the line, the stanza, the ballad, the sonnet, the ode, the epic, the metrical romance, etc. *Two hours a week.* Fall semester.

Eh 20. English Romantic Poets.—A general view of the English Romantic Movement with some attention to the characteristics of the poetry that preceded this movement; a study of selected poems from the writings of Thomson, Collins, Gray, Cowper, and Burns. *Two hours a week.* Fall semester.

Eh 21. English Romantic Poets.—A continuation of course 20. Study of selected poems from the writings of Wordsworth, Coleridge, Scott, Byron, Shelley, and Keats. *Two hours a week.* Spring semester.

Eh 22. Advanced Public Speaking.—This course will give practical training in the principles of voice production, vocal interpretation of literature, extempore speaking, and the various problems of platform art. *Three hours a week.* Fall semester. Open to all undergraduates.

Eh 23. Advanced Public Speaking.—A continuation of course 22. *Three hours a week.* Spring semester.

Summer Term

1. A course in preparatory English for the benefit of students who have entrance credits to make in this department.

2. English Composition and Rhetoric. The work in this course is similar to that of the fall term of the freshman year in the University. It consists of the study of text-books, discussions of principles and methods, and practice in writing. The written work, which is based largely upon the personal observations and experiences of the student, is discussed before the class in order to give practical illustration of principles and methods. Teachers will obtain from this course a familiarity with the methods of teaching English composition followed in the University, and special effort will be made to meet their needs. The text-book used will be Espenshade's Composition and Rhetoric.

3. English Prose. A study of the style and substance of selected writings from the works of English prose writers of the Nineteenth Century. Among the writers dealt with will be Macaulay, Carlyle, Ruskin, Newman, Matthew Arnold, and Stevenson. There will be frequent written reports on the reading assigned, the purpose of the reports being to give practice in writing and to encourage the student toward intelligent interpretation and appreciation of what he reads.

4. English Poetry. A careful and appreciative study of selected poems from the writing of English poets of the early part of the Nineteenth Century. Among the writers dealt with will be Wordsworth, Coleridge, Byron, Shelley, and Keats. An attempt will be made to determine the characteristic merits of the poets studied and to show the relation of these poets to the time in which they lived. Courses 3 and 4 will be given on alternate years. Students in English are requested to indicate their preference for 1907.

An additional course in Shakespeare (a careful reading of a few of the best plays) will be given, if there is sufficient demand.

FORESTRY

Professor Tower

[Note.—The courses in forest botany and forest zoölogy are listed under biology.]

Fy 1. General Forestry.—The importance and scope of the subject; forest as a soil-former and soil-improver; relation of forest to health of a community; relation to the State; esthetic value; influence on floods; importance of forest in irrigation; geographical distribution of forests. The course is recommended for the student in economics. Open to all students. *Two hours a week.* Spring semester.

Fy 2. Farm Forestry.—A study of forest conditions; methods of thinning and planting; of determining amount of wood in single trees and for a given area; discussion of log scales. For students in Agriculture, who have taken Fy 1. *One hour a week.* Fall semester.

Fy 3. Farm Forestry.—Practical work in the woods; measuring trees and determining their contents. † *Three hours a week.* Fall semester.

Fy 4. Forest Measurements.—A continuation of course 10. *Two hours a week.* First half of spring semester.

Fy 5. Forest Measurements, Field Work.—A continuation of course 11. † *Four hours a week.* First half of spring semester.

Fy 6. Silviculture.—A study of the facts which concern forest growth in the relation of the tree to external influences; characteristics of the forest, and of the forest regions of the United States; systems of reproducing forests naturally; thinnings and improvement cuttings. To be taken in connection with course 8. Open to those who have taken courses 2, 3, 4 and 5. *Two hours a week.* Fall semester.

Fy 7. Silviculture.—A continuation of course 6. To be taken in connection with course 9. *Two hours a week.* Spring term.

Fy 8. Silviculture, Field Work.—Special studies and practical work in the forest. A part of the time is devoted to the making of a forest map of 1000 to 2000 acres of forest land in the vicinity of the University. A report accompanies the map describing the condition of the tract and type

of forest growth. Open to students in Forestry who have had Md 1 and 2. † *Four hours a week.* Fall semester.

Fy 9. Silviculture, Field Work.—A continuation of course 8. Includes products and work in planting. The student is required to make a planting plan for about 100 acres of land and prepare a map of the tract. This course should be preceded by Fy 6 and 7. † *Eight hours a week.* Last half of spring semester.

Fy 10. Forest Measurements.—The determination of the contents of felled and standing trees and of the whole forest on a tract; methods of measurement in use in the United States; calculation of rate of growth; construction of volume and yield tables. To be taken in connection with course 11. *Two hours a week.* Fall semester. Open to those who have taken Ms 1, 2, and 4, and courses in forest botany and silviculture.

Fy 11. Forest Measurements, Field Work.—Practice in taking measurements, and office work in computing the results. † *Four hours a week.* Fall semester.

Fy 12. Lumbering.—The industry considered from an economic standpoint; an account of the methods of lumbering in the different parts of the United States. In connection with this course the student is expected to spend two weeks in a lumber camp and prepare a written report on the operations of lumbering in that locality. Fall semester. One-half credit is allowed for the time spent in the lumber camp and in preparing the report. Open to students taking forestry as a major subject. *One hour a week.*

Fy 13. Forest Management.—Financial and economic considerations; the normal forest; principles and preparation of working plans. Open to those who have taken courses 6, 7, 8, 9, 10, and 11. *Two hours a week, the first half of the spring semester.*

Fy 14. Thesis Work.—The preparation of a thesis in forest management. † *Ten hours a week.* Spring semester.

GERMAN

Professor Carr; Professor Huddilston

[Note.—Students who wish to be recommended by this department to teach German will take courses 5a, 5b, 8a, and 8b.]

Gm 1. Elementary German.—Harris's German Lessons; Leander's Träumereien; Zschokke's Der zerbrochene Krug; Storm's Immensee; Grimm's Märchen, selected; Benedix's Der Prozess; elementary composition. *Five hours a week.* Fall semester.

Gm 2. Elementary German.—A continuation of course 1. *Five hours a week.* Spring semester.

Gm 3a. German Prose and Poetry.—Texts selected from the writings of nineteenth's century authors. Easy assigned reading; composition; memorizing of German songs. *Three hours a week.* Fall semester.

Gm 3b. German Prose and Poetry.—A continuation of course 3a. *Two hours a week.* Spring semester.

Gm 4a. German Literature of the Classic Period of the Eighteenth Century.—Special attention will be devoted to the works and biographies of Lessing, Goethe, and Schiller. Assigned reading and reports. Open to students who have completed courses 5a and 5b. *Three hours a week.*

Gm 4b. German Literature of the Classic Period of the Eighteenth Century.—A continuation of course 4a. *Three hours a week.*

Gm 5a. General View of German Literature.—Kluge's Deutsche National-Literatur; Thomas's German Anthology; Gudrun and Walther von der Vogelweide (both in modern German); assigned reading and weekly reports. Open to students who have completed courses 3a and 3b. *Three hours a week.*

Gm 5b. General View of German Literature.—A continuation of course 5a. *Three hours a week.*

Gm 6a. Scientific German.—Wait's German Scientific Reader. Open to students who have completed courses 1 and 2. *Two hours a week.* Fall semester.

Gm 6b. Scientific German.—German scientific texts selected from the Sammlung Göschen. A continuation of course 6a. *Two hours a week.* Spring semester.

Gm 7a. German Composition and Conversation.—Krüger and Smith's German Conversation Book; Meissner's German Conversation; exercises based upon the New Yorker Staats-Zeitung and Fliegende Blätter. Open to students who have completed courses 1 and 2. *Two hours a week.* Fall semester.

Gm 7b. German Composition and Conversation.—A continuation of course 7a. *Two hours a week.* Spring semester.

Gm 8a. Middle High German.—Wright's Middle High German Primer; translation of selections from the Nibelungenlied into modern German. Primarily for graduates, but open to undergraduates who elect course 4a or 5a. *Two hours a week.* Fall semester.

Gm 8b. Old High German.—Wright's Old High German Primer; Braune's Althochdeutsches Lesebuch. Primarily for graduates, but open to undergraduates who elect course 4b or 5b. *Two hours a week.* Spring semester.

Gm 9. Gothic.—Wright's Gothic Primer. Primarily for graduates. *One hour a week.* Spring semester.

Summer Term

1. Elementary Course. The work is that done in preparatory schools in one year, and in colleges in one half-year. Text-books: Whitney's Brief German Grammar (H. Holt & Co.); Hempl's Easiest German Reading (Ginn & Co.); and Hauff's Das kalte Herz (D. C. Heath & Co.).

2. Intermediate Course. The work is that done in colleges in one-half of the second year. Text-books: Goethe's Sesenheim (D. C. Heath & Co.); Schiller's Wilhelm Tell (C. E. Merrill & Co.); Heine's Harzreise (Ginn & Co.); and Harris's German Composition (D. C. Heath & Co.).

3. Advanced Course. History of German Literature. For teachers and others who have had at least two years of German. Text-books: Kluge's Deutsche National-Literatur (G. E. Stechert & Co., New York) and Max Müller's German Classics (Oxford, 1886). This course will not be given, unless the demand justifies it.

GREEK

Professor Huddilston

Gk 1. Xenophon.—Hellenica, Books I-IV. Study of syntax, and daily exercises in writing Greek. *Four hours a week.* Fall semester.

Gk 2. Homer.—Odyssey, Books VI-XII. The reading of the remaining books, in English translation, is required. Assigned readings on the history of Greek poetry, "the Homeric question," and Homeric antiquities. *Four hours a week.* Spring semester.

Gk 3. Attic Orators.—Some of the shorter orations of Demosthenes; selections from the minor Attic orators; parallel reading on the history of Greek prose literature, and the public economy and social life of Athens. *Two hours a week.* Fall semester.

Gk 4. Greek Tragedy.—Euripides's Medea and Sophocles's Antigone. The reading of several other plays in English translation is required; also, parallel reading on the history of the Greek tragic drama. *Three hours a week.* Spring semester.

Gk 5. Thucydides.—Bks. II-III. Assigned reading in Herodotus, and a comparative study of the three great historians of Greece. *Three hours a week.* Fall semester. Open to students who have taken courses 1 and 3.

Gk 6. Aristophanes.—The Clouds and the Knights; lectures and collateral reading on the development of Greek comedy. *Two hours a week.* Spring semester. Open to students who have taken courses 2 and 4.

Gk 7. Plato.—Selected dialogues. Lectures on the history of Greek philosophy with special reference to Plato and Aristotle. *Two hours a week.* Fall semester. Open to students who have taken courses 3 and 5.

Gk 8. Pindar.—The Olympian and Pythian Odes; supplementary reading on the history of Greek lyric poetry. *Two hours a week.* Spring semester.

Gk 9. Greek Sculpture.—Lectures, illustrated by photographs and lantern slides. This course does not presuppose a knowledge of Greek,

and is intended to serve as a general introduction to the history of the fine arts. The interdependence of the arts and their relation to the life of the Greeks, as well as their relation to the world's subsequent art, are emphasized. *Two hours a week.* Given in the fall semester of odd years.

Gk 10. Greek Sculpture.—A continuation of course 9, including a study of Greek architecture. *Two hours a week.* Given in the spring semester of even years.

Gk 11. New Testament Greek.—This course is intended for those who have no acquaintance with ancient languages, and, with course 12, is expected to give considerable facility in reading the narrative portions of the Greek Testament. It is open to all students. *Three hours a week.* Given in the fall semester of even years.

Gk 12. New Testament Greek.—A continuation of course 11. Reading of the Gospels of John and Matthew; syntax. *Three hours a week.* Given in the spring semester of odd years.

Gk 13. Greek Private Life.—Lectures, illustrated with lantern slides and photographs. Assigned reading. *Two hours a week.* Given in the fall semester of even years.

Gk 14. Greek Religion.—A study of the chief divinities in ancient Greek religion. Lectures and assigned reading. Investigation of special topics by members of the class. *Two hours a week.* Given in the spring semester of odd years.

Gk 15. Greek Prose Composition.—A course in writing Greek, intended to continue the work begun in Gk 1. *One hour a week.* Spring semester.

Gk 18. Greek Prose Composition.—An advanced course consisting of the translation into Greek of narrative and rhetorical passages. *One hour a week.* Fall semester.

Gk 19. Greek Prose Composition.—A continuation of course 18. *One hour a week.* Spring semester.

For the accommodation of those students who have not presented Greek for entrance to college the two following courses in elementary Greek are offered.

Gk 20. Elementary Greek.—The declensions, conjugations; Xenophon's Anabasis, Books I-II, and daily writing of Greek based on the text. *Five hours a week.* Fall semester.

Gk 21. Xenophon and Homer.—Anabasis, Books III-IV; sight reading in Attic prose; selections from Homer's Iliad. *Five hours a week.* Spring semester.

At 1. Italian Art.—The revival of the fine arts in Italy, with special reference to the history of painting in Tuscany and Umbria during the early Renaissance. Lectures and collateral reading. The work is illustrated by a large and growing collection of photographs and casts. *One hour a week.* Given in the fall semester of even years.

At 2. Italian Art.—A continuation of course 1, dealing chiefly with the masters of the high Renaissance in Florence and Rome. *One hour a week.* Given in the spring semester of odd years.

At 3. Italian Art.—Painting in the north of Italy, and the culmination of the Italian Renaissance in the Venetian masters. Lectures and collateral reading. *One hour a week.* Given in the fall semester of odd years.

At 4. Italian Art.—A continuation of course 3. *One hour a week.* Given in the spring semester of even years.

HISTORY

Professor Fellows; Professor Colvin; Dr. Stephens (Summer Term)

Hy 1. Mediæval History.—A general course covering the period from 395 to 1500 A. D. The disintegration of the Roman Empire; ecclesiastical institutions; feudalism; struggle between the papacy and the empire; rise of modern nations. Required of major students in history. *Three hours a week.* Fall semester. Open to all students.

Hy 2. Modern History.—Continuation of course 1 to the present time. A rapid survey of the Reformation; the absolute monarchy in France; the French Revolution; the Napoleonic era; Europe in the nineteenth century. *Three hours a week.* Spring semester. Open to all students.

Hy 3. History of England.—From early times to the beginning of the Stuart period. Especial attention is given to social and industrial conditions. *Two hours a week.* Fall semester. Open to all students.

Hy 4. History of England.—Continuation of course 3. From the beginning of the Stuart period to the present. *Two hours a week.* Spring semester. Open to all students.

Hy 5. Modern Continental Europe.—A general course from 1789 to the present time. *Two hours a week.* Fall semester. Open to technical students only.

Hy 6. Modern Continental Europe.—Similar to course 5. *Three hours a week.* Fall semester. Open to technical students only.

Hy 7. History of the United States.—The period from 1783 to the beginning of Jackson's administration. This course will begin with a brief study of Colonial history from 1750. *Three hours a week.* Fall semester. Open to all students.

Hy 8. History of the United States.—A continuation of course 7, through the Period of Reconstruction. *Three hours a week.* Spring semester. Open to all students.

[The following courses are open only to advanced students.]

Hy 9. The Renaissance and the Reformation.—The period from 1300 to 1648 A. D. *Two hours a week.*

Hy 10. The Renaissance and the Reformation.—A continuation of course 9. *Two hours a week.*

Hy 11. History of Modern Continental Europe.—The period from the Peace of Utrecht to the fall of Napoleon I. *Three hours a week.*

Hy 12. History of Modern Continental Europe.—The period since the fall of Napoleon I. *Three hours a week.*

Hy 13. Industrial and Social History of England.—The medieval manor, town, guild, and foreign trade; Black Death and Peasants' Rebellion; breaking up of the medieval system; expansion of England; the industrial revolution; government control in the nineteenth century; and the growth of voluntary association. *Two hours a week.*

Hy 14. Historical Construction and Criticism.—*One hour a week.*

Summer Term

1. United States History. The period from the beginning of Jackson's administration to the Civil War.

2. English History. The Tudor period, giving especial attention to the Reformation and social and industrial development.

3. Modern Europe. From 1815 to 1875.

HORTICULTURE

Professor Beckenstrater

Courses one to six inclusive are required of all students in the four years' course in the College of Agriculture. Courses seven to thirteen are elective and open to students who have had sufficient preparation to do the work.

Ht 1 is pre-requisite to Ht 3. Ht 8 should be preceded by Ag 1 and 2 of the Agronomy department and Ht 11 and 12 by Ht 10.

Ht 1. Principles of Fruit Growing.—A study of the conditions of culture of orchard and small fruits. Lectures and text-books. *Two hours a week.* Spring semester.

Ht 2. Pomology.—Lectures, assigned readings and laboratory work on the leading groups of fruits. Open to juniors and seniors. *Two hours a week.* Fall semester.

Ht 3. Laboratory Horticulture.—Practical work in orchard and garden supplementary to Ht 2. † *Two hours a week.* Fall semester.

Ht 4. Vegetable Gardening.—A study of principles of vegetable gardening accompanied by field practice in the actual growing of plants. *Two hours a week.* Spring semester.

Ht 5. Handicraft.—Practical work in the greenhouse, gardens and orchard. † *Four hours a week.* Spring semester.

Ht 6. Insecticides and Fungicides.—A study of the materials used in spraying, their preparation and application and methods of combating insects and fungi. *One hour a week.* Spring semester.

Ht 7. Plant Breeding.—Studies in heredity and improvement of types. Text-book, lectures, assigned readings, and laboratory work. *Two hours a week.* Fall semester.

Ht 8. Landscape Gardening.—Lectures, assigned readings, field work and the mapping and laying out of grounds. *Two hours a week.* Spring semester.

Ht 9. General Horticulture.—An introductory course designed to cover the entire field of horticulture in a general way. Intended for students who desire a general knowledge of the subject. Elective and open to all students of the University. *Three hours a week.* Fall semester.

Ht 10. Greenhouse Construction and Management.—A study of the different greenhouse crops, forcing plants under glass, drawing plans of greenhouses, studying heating systems and methods of building. Open to juniors and seniors. *Two hours a week.* Fall semester.

Ht 11. Floriculture and Plant Propagation.—Text-book, lectures, and assigned readings, supplemented by practical work in the greenhouse. *Two hours a week.* Spring semester.

Ht 12. Growing Vegetables Under Glass.—In this course the student will receive practice in the actual growing of the plants in the greenhouse. Open to seniors. *Time to be arranged.*

Ht 13. Horticultural Experimentation.—Original work for those desiring to become teachers or investigators. Open to seniors and graduate students. *Time to be arranged.*

LATIN

Professor Chase

Lt 1. Livy and Composition.—Selections from Livy, History of Rome; composition, with review of Latin syntax. *Four times a week.* Fall semester.

Lt 2. Cicero and Horace.—Cicero, De Senectute; Horace, Odes and Epodes; Latin composition. *Four times a week.* Spring semester.

Courses 1 and 2 are required of candidates for the B. A. degree who elect Latin.

Lt 3. Terence and Plautus.—The Andria, Adelphoe, or Phormio of Terence; the Captivi, Trinummus, or Menaechmi of Plautus; lectures on the development of Roman comedy. *Three times a week.* Fall semester.

Lt 4. Tacitus and Cicero.—The Agricola and Germania of Tacitus; selected letters of Cicero. *Three hours a week.* Spring semester.

Lt 6. Latin Composition.—Practice in writing Latin; study of Latin syntax. *One hour a week.* Fall semester.

Lt 6. Latin Composition.—Practice in writing Latin; study of Latin rhetoric. *One hour a week.* Spring semester.

Lt 7. Pliny and Tacitus.—Selected letters of Pliny the younger; readings in the Annals of Tacitus; the Roman Empire. *Two hours a week.* Given in the fall semester of even years.

Lt 8. The Roman Elegiac Poets.—Selections from Catullus, Tibullus, Propertius, and Ovid; lectures on the elegiac poets. *Two hours a week.* Given in the spring semester of odd years.

The following may be counted toward the Master's degree

Lt 9. Roman Satire.—Selections from Ennius, Lucilius, Varro, Horace, Persius, Juvenal, Petronius. Open to students who have taken, or are taking, courses 3-4, or 7-8. *Two hours a week.* Given in the fall semester of odd years.

Lt 10. Roman Satire.—A continuation of course 9. *Two hours a week.* Given in the spring semester of even years.

Lt 11. Roman Philosophy.—Lucretius (selections); Cicero (selections from the Academica, De Officiis, Tusculanæ Disputationes, De Finibus, De Natura Deorum); Seneca (De Providentia, De Vita Beata); lectures on the history and development of ancient philosophy. Open to students who have taken, or are taking, courses 3-4, or 7-8. *Two hours a week.* Given in the fall semester of even years.

Lt 12. Roman Philosophy.—A continuation of course 11. *Two hours a week.* Given in the spring semester of odd years.

Lt 13. Roman Literature.—General introduction to the subject; illustrative class-room readings; a choice of one of six courses of collateral reading of Roman authors. Open to students who have taken courses 1-4. *Three hours a week.* Given in the fall semester of even years.

Lt 14. Roman Literature.—A continuation of course 13. *Three hours a week.* Given in the spring semester of odd years.

Lt 15. Roman Rhetoric and Oratory.—Quintilian (selections from the Institutio Oratoria); Tacitus (Dialogus de Oratoribus); Cicero (selections from the Brutus, De Oratore, Orator); a study of sample orations of Cicero, and of some of the fragments of Roman oratory. Open to students who have taken courses 1-4. *Two hours a week.* Given in the fall semester of odd years.

Lt 16. Roman Rhetoric and Oratory.—A continuation of course 15. *Two hours a week.* Given in the spring semester of even years.

Lt 18. Roman Private Life.—Text-book work, supplemented by collateral reading and lectures upon some of the more important and interesting customs and institutions of Roman every-day life. Open to students who have taken courses 1-4. *One hour a week.* Given in the fall semester of odd years.

Lt 19a. The Latin Language.—A discussion of the fundamental principles of linguistic growth and change and of the relationship of Latin to other languages. Latin Phonetics. The development of inflectional forms in Latin. Lectures and recitations. *One hour a week.* Given in the fall semester of odd years.

Lt 19b. The Latin Language.—A continuation of Lt 19a. *One hour a week.* Given in the spring semester of even years.

Lt 20. Roman Epigraphy.—The principles of the science, and the interpretation of selected inscriptions. *One hour a week.* Given in the spring semester of even years.

Lt 21. Rapid Reading of Latin.—Practice in reading without translation. Selections from various authors. Especially adapted for students expecting to teach the language. Open only to students whose major subject is Latin. *One hour a week.* Spring semester.

Lt 22. SANSKRIT.—An elementary course in the classical language of India, with especial reference to the light it throws upon the history and grammar of the languages of Europe. *Two hours a week.* Given in the fall semester of 1907-8, and occasionally.

Lt 23. SANSKRIT.—A continuation of Lt 22, with more attention to the classical literature of India. *Two hours a week.* Given in the spring semester of 1907-8, and occasionally.

SUMMER TERM

The Latin Department offers two distinctly different lines of study, intended to meet the needs of three classes of students.

1. FOR TEACHERS OF LATIN, AND FOR STUDENTS WISHING TO GAIN ENTRANCE CREDITS IN LATIN, one course is offered in Virgil and one in either Cicero's Orations or Cæsar's Gallic War, the choice to be decided largely at the option of the class at organization. In these two courses various questions connected with the teaching of Latin will be discussed, such as questions of spelling and pronounciation, of grammatical forms and inflections, of syntax, prosody, etc.; also questions of bibliography, methods of translation, history, mythology, literature, and the various aids to the elucidation of the authors studied, together with the fundamental principles of the Latin language.

2. FOR STUDENTS WHO DESIRE COLLEGE CREDITS LOOKING TO THE B. A. DEGREE. It is the plan of the department to offer a double course that shall cover the work of an entire college term and be equivalent to that required for one college credit, and to vary this course from year to year so that a student in a few summers may complete a fairly comprehensive course of college study in Latin. For the summer of 1907 it is proposed to offer a course in Livy, books XXI-XXII, that will be equivalent to the work offered for the first term of the Freshman year. It is hoped to follow this by the work of the second term of the Freshman year in 1908, and so on in successive years. We call the especial attention of secondary school teachers who have not had the advantage of complete college training in Latin to these courses, as we believe they afford an unusual opportunity to them to increase their equipment.

MATHEMATICS AND ASTRONOMY

Professor Hart; Professor Willard; Mr. Moots; Mr. Sweet; Mr. Reed

Students electing Mathematics as a major subject should expect to take courses 1, 2, 4, 6, 7, 8, 11, 12, 13, 15, 19, 20 and either courses 9 and 10 or Md 5. They are also advised to take Md 3, 4, 7, and 8 and Ps 8.

Ms 1. Solid Geometry.—Solid and spherical geometry, including original demonstrations and the solution of numerical problems. The text-book is Bush and Clarke's Solid Geometry. *Five hours a week for ten weeks.* Spring semester. Required of all freshmen in the B. A. courses, and of those in the B. S. courses who did not offer it for admission.

Ms 2. Algebra.—A brief review of the theory of exponents, quadratic equations, and the binomial theorem; indeterminate equations; logarithms, including practice in the solution of numerical exercises; undetermined coefficients; partial fractions; exponential and logarithmic series, and the computation of logarithms; permutations and combinations; theory of equations. The text-book is Hawke's Advanced Algebra. *Five hours a week.* Fall semester, first fourteen weeks.

Ms 4. Plane Trigonometry.—The text-book is Crockett's Trigonometry. *Five hours a week.* Fall semester, last four weeks; spring semester, first eight weeks. Courses 2, 4, and either 1, 19, or 6a are required of all candidates for the Bachelor's degree.

Ms 6a. Analytic Geometry.—A study of the point, line, and circle. Open to students who have taken courses 1, 2 and 4. The text-book is Ashton's Analytic Geometry. *Five hours a week.* Spring semester, last ten weeks.

Ms 6b. Analytic Geometry.—A continuation of course 6a. Conic sections; elements of solid analytic geometry. *Five hours a week.* Fall semester, first eight weeks.

Ms 7. Calculus.—Differentiation of the elementary forms of algebraic and transcendental functions; successive differentiation; differentials; integration of the elementary forms; integration between limits. Open to students who have taken courses 1, 2, 4, 6a, and 6b. The text-

book is Granville's Differential and Integral Calculus. *Five hours a week.* Fall semester, last ten weeks.

Ms 8. Calculus.—A continuation of course 7. Integration as a summation; various methods of integration. Applications of differential and integral calculus. *Five hours a week.* Spring semester.

Ms 9. Descriptive Astronomy.—The text-book is supplemented by informal lectures, and illustrated by lantern slides, the Trouvelot drawings of celestial objects, and work in the observatory. Open to students who have taken courses 1, 2, 4, and, preferably, Ps 1 and Ps 5. The text-book is Young's Manual of Astronomy. *Three hours a week.* Spring semester.

Ms 10. Practical Astronomy.—A course arranged to meet the needs of engineering students, and consisting mainly of problems in the conversion of time, the determination of terrestrial latitudes and longitudes, and the establishment of meridian lines. The data for these problems are taken largely from the student's own observations, and the course is intended to emphasize the necessity of careful work in the field, as well as accurate and well arranged computations. The instruments employed are the sextant, artificial horizon, portable chronometer, theodolite, and vertical circle. Open to students who have taken courses 9, 4, and 19. *Two hours of recitations or lectures and one hour of observatory work a week.* Fall semester.

Ms 11. Advanced Algebra.—Determinants and the solution of higher equations. Open to students who have taken courses 1, 2 and 4. *Three hours a week.* Spring semester.

Ms 12. Advanced Integral Calculus.—A course based upon Byerly's Integral Calculus. Open to students who have taken courses 6, 7 and 8. *Three hours a week.* Given in the fall semester of odd years.

Ms 13. Advanced Integral Calculus.—A continuation of course 12. *Two hours a week.* Given in the spring semester of even years.

Ms 15. Differential Equations.—The text-book is Murray's Differential Equations. Open to students who have taken courses 7 and 8. *Two hours a week.* Given in the spring semester of odd years.

Ms 16. Practical Astronomy.—The theory and use of the sextant, universal instrument, transit, and equatorial. Open to students who

have taken courses 6, 7, 8, 9, 19, and, preferably, 10. *Three hours a week.* Given in the fall semester of odd years.

Ms 17. Practical Astronomy.—A continuation of course 16. *Three hours a week.* Given in the spring semester of even years.

Ms 19. Spherical Trigonometry.—A continuation of course 4, with additional problems and applications to spherical astronomy. *Two hours a week.* Fall semester.

Ms 20. Solid Analytic Geometry.—A course based upon C. Smith's Solid Geometry. *Three hours a week.* Given in the fall semester of even years.

Summer Term

Three or more of the following courses will be given, depending upon the number of candidates indicating their desire to elect them.

1. Plane Trigonometry. The solution of right and oblique plane triangles, and of problems in surveying, together with the use of surveying instruments. No text-book will be required for this course, but those having logarithmic tables should bring them, and also any modern text-book on trigonometry, which will be useful for reference.

2. Solid Geometry. This course is offered especially for the benefit of students who intend to enter college, but who have not been able to complete the requirements in solid geometry. Bush and Clarke's Solid Geometry will probably be used as the text-book, but Philips and Fisher's, Wells,' and other books will be used for reference.

3. College Algebra. The theory of quadratic equations, the binomial theorem, and so much of the regular freshman course in algebra as time will permit. Text-book to be selected at the opening of the term.

4. Analytic Geometry. A brief course covering the elements of this subject.

5. Descriptive Astronomy. Lectures accompanied by work in the observatory.

MECHANICAL ENGINEERING

Professor Jewett; Professor Curtis; Mr. Davee; Mr. Carter

Me 1a. Woodworking.—A number of graded exercises in woodworking, designed to give the student familiarity with the tools used in modern woodworking practice, and also teach him to work from dimensioned

drawings. These exercises lead up to pattern-making. The pattern work consists of making complete patterns and core boxes from drawings. Required of students in mechanical engineering. Charge for materials, $4.00. * *Six hours per week.* Fall semester.

Me 1b. Woodworking.—A shorter course than Me 1a, arranged for students in electrical engineering. Required. Charge for materials, $4.00. * *Four hours per week.* Fall semester.

Me 2. Forge Work.—Forging; welding; tool dressing. A set of lathe tools and cold chisels for use in machine work is made by each student. Required of students in mechanical and electrical engineering. The text-book used is Bacon's Forge Practice. Charge for material, $5.00. Cost of hammer, calipers and scale, about $2.50. * *Four hours per week.* Spring semester.

Me 3. Kinematical Drawing.—This course supplements Me 4. The drawings are of cams and gear teeth and graphical studies of kinematic problems. Required of students in mechanical engineering. * *Three and one-half hours per week.* Fall semester.

Me 4. Kinematics.—A study of motion in machine construction and of the elements of machines; links, gears, cams, etc. The text-book is Schwamb and Merrill's Elements of Mechanism. Required of students in mechanical and electrical engineering. *Three hours per week.* Spring semester.

Me 5a. Machine Work.—Exercises in chipping and filing; lathe work; exercises on planer, shaper and milling machines; making cut gears, machinists taps, etc. Required of students in mechanical engineering. Charge for materials, $5.00. * *Six hours per week.* Fall semester.

Me 5b. Machine Work.—A continuation of the machine tool work in the spring term. Required of students in mechanical engineering. Charge for materials, $5.00. * *Nine hours per week.* Spring semester.

Me 5c. Machine Work.—A shorter course than Me 5a and 5b, required of students in electrical engineering. Charge for material $5.00. * *Four hours per week.* Fall semester.

Me 5d. Machine Work.—A continuation of the machine tool work in the spring semester. Required of students in electrical engineering. Charge for materials, $5.00. * *Four hours per week.* Spring semester.

Me 6. Foundry Work.—Foundry instruction is given in molding, mixing of materials, operation of cupolas, etc. The work is assigned in connection with Me 5, ten per cent of the hours registered for under Me 5 being applied to foundry work.

Me 7. Valve Gears.—The principle steam engine valve motions are studied in order to enable the student to gain a knowledge of the method of designing valve mechanisms. The Zeuner, Bilgram, and other valve-diagrams are made use of in this connection. Practical problems are solved in the drawing-room. Required of students in mechanical engineering. *Two hours per week.* Spring semester.

Me 8. Machine Design.—A study of the designing of machines, involving the selection of materials, proportioning of parts for strength and rigidity, etc. Required of students in mechanical and electrical engineering. *Three hours per week.* Spring semester.

Me 9. Materials of Engineering.—Metallurgy of iron, steel, copper, and the principle alloys. Physical properties of the metals, timber, hemp rope, etc. Protective coatings and preservatives. Required of students in mechanical engineering. *Two hours per week.* Fall semester.

Me 10. Elementary Steam Engineering.—Types and details of steam boilers and engines and auxilliary machinery. A consideration of fuels and the chemistry of combustion. Elementary study of the Bilgram and Zeüner valve diagrams. The use of the steam engine indicator. Required of students in mechanical and electrical engineering. *Two hours per week.* Spring semester.

Me 11. Thermodynamics.—The fundamental theories relating to the steam engine and other heat engines. Steam calorimeters, injectors, compressors and refrigerating machinery included. Required of students in mechanical and electrical engineering. *Three hours per week.* Fall semester.

Me 12. Steam Boiler Design. A study of the important points affecting the design of fire-tube and water-tube boilers, including the complete design of a boiler in the drawing room. Required of students in mechanical engineering. * *Six hours per week.* Fall semester.

Me 13. Hydraulic Machinery.—A study of the various forms of machinery used with hydraulic power, either in its development or its

application. Required of students in mechanical engineering. *Two hours per week.* Spring semester. Ce 23 is a prerequisite for this course.

Me 15a. Mechanical Laboratory.—The calibration of instruments used in engineering testing followed by the more elementary experimental work. Required of Juniors in mechanical engineering. Charge for the course is $2.00. † *Two hours per week.* Spring semester.

Me 15b. Mechanical Laboratory.—Tests of materials, lubricants, injectors, use of calorimeters, etc. Required of Seniors in mechanical engineering. Charge for the course is $2.00. † *Two hours per week.* Fall semester.

Me 15c. Mechanical Laboratory.—Tests of steam engines and boilers, gasoline engines, etc. Required of Seniors in mechanical engineering. Charge for the course is $2.00. † *Three hours per week.* Spring semester.

Me 16. Advanced Steam Engineering.—A continuation of course Me 11, indicating the connection between theory and practice in steam engines, steam turbines, air compressors, refrigerating machines, and gas engines. Considerations affecting the design and efficiency of operation of heat motors. Required of students in mechanical engineering. *Two hours per week.* Spring semester.

Me 17. Steam Engine Design.—A study of problems affecting the design of the steam engine with regard to their bearing on general machine design. A steam engine is partially designed in the drawing room. Required of students in mechanical engineering. † *Six hours per week.* Spring semester.

Me 18. Advanced Machine Design.—A continuation of Me 8, including the execution of the design of some typical machines. Required of students in mechanical engineering. *Two hours per week.* Fall semester.

Me 19. Machine Drawing.—Instruction in modern drafting-room methods, shop terms, etc. The practical application of drawing to use in the construction of machines. Required of students in mechanical engineering. * *Four hours per week.* Spring semester.

Me 20. Heating and Ventilation. A lecture course. Required of students in mechanical engineering. *One hour per week.* Spring semester.

Me 21. Seminary.—General discussion of leading articles appearing in current engineering literature. Elective. *One hour per week.* Fall and spring semester.

Me 22. Thesis.—The results of some original investigation or design presented in proper form. The subject should be selected early in the fall term of the senior year. See regulations regarding degrees on page 36.

Me 24. Mechanism of Machines.—Lectures supplementing the course in Me 4. Required of students in mechanical engineering. *One hour per week.* Fall semester.

Me 25. Strength of Materials by Test.—A course in the mechanical laboratory for students in civil engineering. Charge for the course is $2.00. † *Two hours per week.* Spring semester.

Me 26. Mechanical Laboratory.—A course of experiments in the laboratory especially arranged to meet the needs of the student in electrical engineering. Required. Charge for the course is $2.00. † *Three hours per week.* Fall semester.

MECHANICS AND DRAWING

Professor Weston; Mr. Grover; Mr. Sampson

Md 1. Drawing.—Instruction and practise in technical free-hand drawing and lettering, in the care of drawing instruments and their use in elementary problems involving straight lines and circles. The text-book is Anthony's Mechanical Drawing. † *Four hours a week.* Fall semester.

Md 2. Mechanical Drawing.—The study and construction of geometrical problems, conic sections, and problems in projection, followed by practise in the conventional methods of representing surfaces and materials by means of section lines and water colors. The text-book is Anthony's Mechanical Drawing. † *Four hours a week.* Spring semester.

Md 3. Descriptive Geometry.—Elementary problems; tangents, intersection of planes, cylinders, cones, spheres, etc. The time is divided between the recitation room and drawing room. The text-book is Church's Descriptive Geometry. *Two hours a week.* Fall semester.

Md 4. Descriptive Geometry.—A continuation of course 3. *Two hours a week.* Spring semester.

Md 5. Mechanics.—The fundamental principles of statics, kinematics, and kinetics, with applications to practical problems; exercises in finding centre of gravity and moment of inertia; the study of stresses and strains in bodies subject to tension, compression, and shearing; the common theory of beams, including shearing force, bending moment, and elastic curve; torsional stresses and theories of stress in long columns. The text-book is Maurer's Technical Mechanics, supplemented by lectures. *Five hours a week.* Fall semester.

Md 6. Mechanics.—A continuation of course 5. *Five hours a week.* Spring semester.

Md 7. Advanced Mechanics.—General principles of kinematics, statics, and kinetics; the mathematical theory of elasticity; the theory of the potential function, with applications to problems in gravitation, hydro-mechanics, etc. *Two hours a week.* Fall semester.

Md 8. Advanced Mechanics.—A continuation of course 7. *Three hours a week.* Spring semester.

Md 9. Methods of Drawing.—A continuation of course 2, including isometric projection, cabinet projection, and linear perspective; followed by instruction and practise in mechanical lettering, the design of titles, of working drawings, and the making of tracings and blue-prints. † *Four hours a week.* Fall semester.

Md 10. Free-hand Drawing.—Free-hand pencil practise in the drawing of designs involving straight lines and curves, in lettering, in model drawing, and in pictorial perspective. A general course designed for non-engineering students. † *Four hours a week.* Fall semester.

MILITARY SCIENCE AND TACTICS

Professor Brown

Mt 1. Military, First Year's Course.

(a) Practical:

1—U. S. Infantry Drill Regulations to include the School of the Battalion, Advance and Rear Guards, Outposts, Marches and Ceremonies.

2—Infantry Target Practice.

3—Field Service Regulations.

4—Guard Duty.

(b) Theoretical:

1—U. S. Infantry Drill Regulations to include the School of the Company.

2—Manual of Guard Duty.

3—Field Service Regulations.

4—Small Arms Firing Regulations.

Required of all students, except as provided on p. 32. *Five hours, or the equivalent, a week, counting one credit.*

Mt 2. Military, Second Year's Course.

(a) Practical:

The same as course Mt 1 (a).

(b) Theoretical:

1—U. S. Infantry Drill Regulations, School of the Battalion, Advance and Rear Guards, Outposts, Marches and Ceremonies.

2—Records and Official Papers.

3—Small Arms Firing Regulations.

Open to all who have completed course 1. All will be non-commissioned officers. *Five hours, or the equivalent, a week, counting one credit.*

Mt 3. Military, Third Year's Course.

(a) Practical:

Duties consistent with rank in carrying out (a) in courses 1 and 2.

(b) Theoretical:

Assistant instructors over those taking course Mt 1 (b).

Open to all who have completed course 2. All will be officers, or non-commissioned officers. *Five hours, or the equivalent, a week, counting one credit.*

Mt 4. Military, Fourth Year's Course.

(a) Practical:

The same as for course Mt 3 (a).

(b) Theoretical:

Assistant instructors over those taking course Mt 2 (b).

Open to all who have completed course 3. All will be officers. *Five hours, or the equivalent, a week, counting one credit.*

Organization of the Battalion, October, 1907

Major, Commanding the Battalion, J. Jacobs.
Captain and Adjutant, W. T. Osgood.
Captain and Quartermaster, R. C. Turner.

Company "A," Captain, J. S. Irish.
First Lieutenant, K. R. Fox.
Second Lieutenants, J. M. Cadwallader, J. N. Philbrook.
Sergeants, S. M. Jones, C. Patch, J. J. Burke, C. S. Robinson, N. C. Pinkham, H. G. Woods.
Corporals, F. H. Derby, A. C. Eaton, C. H. Gilpatrick, W. H. Burns, W. A. Cook, G. C. Leavitt, F. J. Morrison.

Company "B," Captain, H. W. Bowman.
First Lieutenant, G. E. Springer.
Second Lieutenants, R. T. Cole, L. W. Ames, F. E. Wiley.
Sergeants, A. H. Hart, A. H. Blaisdell, H. K. Fenn, W. F. Davis, A. L. Scott.
Corporals, R. Smith, F. W. Philbrook, M. F. McCarthy, B. S. Williams, E. N. Maxcy.

Company "C," Captain, B. I. Collins.
First Lieutenant, E. S. Alton.
Second Lieutenants, G. V. Nauman, H. W. Wright.
First Sergeant, I. F. Hooper.
Sergeants, O. W. Holmes, C. W. Rowe, S. Waite, J. P. Flannagan.
Corporals, G. D. Bearce, A. C. Hammond, B. C. Marble, W. F. Wilson, E. S. Bigney.

Company "D," Captain, H. L. Farnham.
First Lieutenant, H. Chadwick.
Second Lieutenants, H. M. Woods, E. Lamb, W. O. Harvey.
Sergeants, G. A. Wakefield, H. C. Faulkner, C. L. Lycette, M. J. McHale, H. P. Burden, J. P. King.
Corporals, D. N. Peaslee, R. E. Patterson, P. S. Strout, R. R. Henderson.

PHARMACY

Professor Jackman

Pm 1. Pharmaceutical Chemistry.—Chemical formulæ; principles, chemical reactions; chemical equations, with special reference to pharmaceutical processes. The text-book is Prescott and Johnson's Qualitative Chemical Analysis. *Five hours a week.* Fall semester.

Pm 2. Pharmacy.—Pharmacopœias, dispensatories, etc.; weights and measures; specific gravity; pharmaceutical uses of heat; pharmaceutical arithmetic and problems; the chemical elements, official salts, their preparations; organic compounds, their official preparations; official drugs, their preparations; animal preparations; extemporaneous pharmacy; the principles of dispensing, etc. The text-book is Caspari's Pharmacy. *Five hours a week.* Fall semester.

Pm 3. Laboratory Pharmacy.—Official and National Formulary preparations and tests. The operations of manufacturing pharmacy, including the preparation of granular and scale salts, infusions, syrups, tinctures, and other galenicals; official tests of chemicals, drugs, and preparations, for identity, strength and adulteration; drug assaying. The text-books are Caspari's Pharmacy and the U. S. Pharmacopœia. † *Twelve hours a week.* Fall semester.

Pm 4. Pharmacopœia.—A complete review of the pharmacopœia, with special reference to the chemical and pharmaceutical principles involved in tests and preparations. The text-books are Caspari's Pharmacy and the U. S. Pharmacopœia. *Five hours a week.* Spring semester.

Pm 5. Inorganic Pharmacognosy.—Nomenclature; practical exercises in the identification of specimens. The text-book is the U. S. Pharmacopœia. *Two hours a week.* Fall semester.

Pm 6. Organic Pharmacognosy.—Nomenclature; habitat, etc.; practical exercises. The text-books are the U. S. Pharmacopœia and Culbreth's Materia Medica. *Four hours a week.* Spring semester.

Pm 7. Materia Medica.—Chemicals and drugs; their nature, uses, classification, therapeutic action, and doses; poisons, and antidotes. The text-book is Potter's Materia Medica. *Three hours a week.* Fall semester.

Pm 9. Pharmacy Readings.—Current pharmacy literature; research and reference readings; abstracting; reports. † *Three or five hours a week.* Spring semester.

Pm 10. Laboratory Pharmacy.—A continuation of course 3. † *Ten hours a week.* Spring semester.

Pm 11. Prescriptions.—Critical examination of prescriptions from actual files, with reference to inelegance, and to physiological, pharmaceutical, and chemical incompatibility; doses; methods and order of compounding, etc. The text-book is Ruddiman's Incompatibilities in Prescriptions. *Three hours a week.* Spring semester.

PHILOSOPHY

Professor Fernald

Pl 1. Psychology.—Among the topics considered are sensation, structure and functions of the brain, conditions of neural activity, consciousness, attention, conception, discrimination, association, memory, imagination, perception, reasoning, instinct, emotions and sentiments, will as volition, will as choice, and will in relation to character. The text-book is James's Psychology (Briefer Course). *Three hours a week.* Fall semester.

Pl 2. Logic.—The object of this course is to give the student a just appreciation of the functions of language as a means of expressing thought, and a familiarity with the principles of deductive and inductive reasoning. The student is given frequent drills in the application of logical principles. The text-book is Ryland's Logic. *Three hours a week.* Spring semester.

Pl 3. History of Philosophy.—An outline of Greek and medieval philosophy. *Three hours a week.* Fall semester of odd years.

Pl 4. History of Modern Philosophy.—Presupposes Pl 3. *Three hours a week.* Spring semester of even years.

Pl 5. Comparative Psychology.—The psychology of man and of the higher animals compared. A study of other minds than ours with reference to sense-experience, instinct and intelligence, association of ideas, memory, perception of relations, the power to reason, and the emotions.

Open to juniors and seniors who have taken course 1. *Two hours a* week. Spring semester of even years.

Pl 6. Advanced Psychology.—Besides special topics and general psychology, this course is designed to include a discussion of such phenomena as sleep and dreams, the hypnotic state, thought transference, illusions, and hallucinations. Open to juniors and seniors who have taken course 1. *Two hours a week.* A lecture course given in the spring semester of odd years.

Pl 8. Experimental Psychology.—This course deals with mental processes from the standpoint of experimental study, and seeks to develop the power of introspection of these processes by modern experimental methods. † *Two hours a week.* Fall or spring semester; the same course is given each term. Open to students taking course 1, or who have taken course 1, to the limit of the psychological laboratory.

Pl 9. Problems of Philosophy.—This course should be preceded by Pl 3 and Pl 4. *Two hours a week.* Fall semester of even years and *three hours a week.* Spring semester of odd years.

Pl 10. Advanced Laboratory Psychology.—Experimental and research work. † *Two hours a week.* Fall or spring semester. Open to students who have taken course 8.

Pl 11. Ethics.—Theoretical and practical ethics. A lecture course. *Two hours a week.* Fall semester of even years.

PHYSICS

Professor Stevens; Mr. Bearce; Mr. Murdock; Mr. Reed

[Note.—For students who are specializing in this department the time indicated for the various laboratory courses may be extended.]

Ps 1. General Physics.—Lectures on the dynamics of solids, liquids, and gases; sound and light; experiments before the class; problems. Open to students who have taken Ms 4. *Five hours a week.* Fall semester.

Ps 2. General Physics.—A continuation of course 1; heat and electricity. *Three hours a week.* Spring semester.

Ps 3. Qualitative Laboratory Work.—A course in which students who are preparing to become teachers of physics are given the opportunity of performing the various class room experiments which accompany the lectures in Ps 1 and 2. † *Four hours a week.* Fall semester.

Ps 5. Laboratory Physics.—The subjects usually included in an under-graduate course. Especial attention is given to the reduction of observations, and the tabulation of results. Open to students who have taken either course 1 or course 12. † *Four hours a week.* Spring semester.

Ps 7. Optics.—Lectures in continuation of course 1, based chiefly upon Preston's Light and Drude's Optics. Open to students who have taken Ms 8. *Three hours a week.* Spring semester.

Ps 8. Mathematical Physics.—A course in mathematical physics is offered each year. The subject varies. Open to students who have taken Ms 8. *Two hours a week.* Fall semester.

Ps 9. Mechanics and Heat.—Advanced laboratory work in continuation of course 5. † *Six hours a week, or four hours a week.* Fall semester.

Ps 10. Optics.—Advanced laboratory work in continuation of course 5. † *Six hours a week or four hours a week.* Spring semester.

Ps 11. Electrical Measurements.—Advanced laboratory work in continuation of course 5. † *Six hours a week.* Fall semester.

Ps 12. General Physics.—A course covering the ground of course 1, with more attention to the experimental and historical aspects, and less to the mathematical. The text-book is Aldous's Physics. *Five hours a week.* Fall semester.

Ps 14. Theory of Electrical Instruments.—Lectures on the mathematical theory of instruments, and the methods of eliminating errors. *One hour a week.* Fall semester.

Ps 15. Special Laboratory Course.—A course open to students who have completed courses 9, 10 and 11. A subject is assigned for original

investigation, or the work of a published research is repeated. † *Four hours a week.* Fall semester.

Ps 16. Special Laboratory Course.—A continuation of course 15. † *Six hours a week.* Spring semester.

Ps 18. Electricity and Optics.—Advanced laboratory work in continuation of course 5. † *Four hours a week.* Fall semester.

Ps 19. Least Squares.—A course of lectures covering the more important topics treated in this subject. Required of juniors in civil engineering and elective for others who have taken Ps 1 and 2 and Ms 8. *One hour a week.* Fall semester.

Summer Term

1. An elementary laboratory course. This includes the list of experiments adopted by the Maine colleges for admission in physics.

2. Advanced course. Work in any laboratory course offered in the University may be taken by students in the summer term who are properly qualified.

3. A series of experimental lectures on general physics. The grade of the work in this course will be determined by the preparation of the students electing it.

ROMANCE LANGUAGES

Professor Segall; Professor Raggio; Miss Fellows

French

Rm 1. Elementary French.—Fraser and Squair's Grammar; Syms' Reader. *Five hours a week.* Fall semester.

Rm 2. Elementary French.—A continuation of course 1. Fraser and Squair's Grammar; Bruno, Le Tour de la France; Verne, Une Ville Flottante. *Five hours a week.* Spring semester.

Rm 3a. French Prose.—Bruce, Grammaire française; Lamartine, Histoire de la Gironde (selections); France, Livre de mon ami. Open to students who have taken courses 1 and 2, or an equivalent. *Three hours a week.* Fall semester.

Rm 3b. FRENCH PROSE.—A continuation of course 3a. Bruce, Grammaire française; Sand, La Mare au Diable; Hugo, Quatre-vingt-treize. *Two hours a week.* Spring semester.

Rm 4a. ADVANCED FRENCH PROSE.—France, Le Crime de Sylvestre Bonnard; composition. Open to students who have taken courses 3a and 3b, or an equivalent. *Three hours a week.* Fall semester.

Rm 4b. ADVANCED FRENCH PROSE.—A continuation of course 4a. Contemporary story writers; Taine, L'Ancien Régime; composition. *Three hours a week.* Spring semester.

Rm 5a. ELEMENTARY FRENCH Composition and Conversation. Open to students who have taken courses 1 and 2, or an equivalent. *Two hours a week.* Fall semester.

Rm 5b. ELEMENTARY FRENCH Composition and Conversation.—A continuation of course 5a. *Two hours a week.* Spring semester.

Rm 6a. FRENCH LITERATURE of the Seventeenth Century.—Lanson, Histoire de la Littérature française. Open to students who have taken courses 4a and 4b. *Two hours a week.* Fall semester.

Rm 6b. FRENCH LITERATURE OF THE EIGHTEENTH CENTURY.—A continuation of course 6a. Lanson, Histoire de la Littérature française. *Two hours a week.* Spring semester.

Rm 7a. ADVANCED FRENCH COMPOSITION AND CONVERSATION.—Open to students who have taken courses 5a and 5b. *Two hours a week.*

Rm 7b. ADVANCED FRENCH COMPOSITION AND CONVERSATION.—A continuation of course 7a. *Two hours a week.* Spring semester.

Rm 8a. FRENCH LITERATURE OF THE NINETEENTH CENTURY.—Lanson, Histoire de la Littérature française. Open to students who have taken courses 4a and 4b. *Two hours a week.* Fall semester.

Rm 8b. FRENCH LITERATURE OF THE NINETEENTH CENTURY.—A continuation of course 8a. *Two hours a week.* Spring semester.

Spanish

Rm 9a. Elementary Spanish.—Hills and Ford, Grammar; Ramsey, Reader. *Three hours a week.* Fall semester.

Rm 9b. Elementary Spanish.—A continuation of course 9a. Hills and Ford Grammar; Alarcón, El Capitán Veneno. *Two hours a week.* Spring semester.

Rm 10a. Modern Spanish Prose.—Alarcón; Galdós; Valera. Composition. Open to students who have taken courses 9a and 9b. *Two hours a week.* Fall semester.

Rm 10b. Modern Spanish Prose.—A continuation of course 10a. *Three hours a week.* Spring semester.

Rm 12a. Spanish.—Cervantes, Don Quixote. Open to students who have taken courses 10a and 10b. *Two hours a week.* Fall semester.

Rm 12b. The Spanish Drama in the Seventeenth Century.—A continuation of course 12a. *Two hours a week.* Spring semester.

Italian

Rm 11a. Elementary Italian.—Grandgent's Grammar; Bowen, First Italian Readings. Open to students who have taken courses 1 and 2. *Three hours a week.* Given in the fall semester of odd years.

Rm 11b. Elementary Italian.—A continuation of course 11a. Composition; Goldoni, La Locandiera; Gherardi del Testa, L'oro e l'orpello. *Three hours a week.* Given in the spring semester of even years.

Summer Term

1. An elementary course in French for beginners covering the work done in one year in preparatory schools and in one-half year in college. The books used will be: Chardenal's Complete French Course. For reading and translation, Malot's Sans Famille. (D. C. Heath & Co.) There will also be some elementary French prose composition based on the text read.

2. A more advanced course for those who have studied French in college or preparatory school. The books to be used are: Fraser and

Squair's French Grammar (D. C. Heath & Co.); Hugo's La Chute; Augier's Le Gendre de M. Poirier (D. C. Heath & Co.).

3. A lecture course in French literature: (a) History of the French language, (b) Mediæval French, (c) Great epochs in the literature of France. This course will be given in French.

ORGANIZATION OF THE UNIVERSITY

The University is divided into colleges, each offering several courses upon related subjects. The colleges are interdependent and together form a unit. The organization is as follows:

College of Arts and Sciences
- The Bachelor of Arts Courses
- The Bachelor of Science Courses
- The Summer Term

College of Agriculture
- The Agricultural Course
- The Forestry Course
- The Extension Courses

College of Technology
- The Chemical Course
- The Chemical Engineering Course
- The Civil Engineering Course
- The Mechanical Engineering Course
- The Electrical Engineering Course
- The Mining Engineering Course

College of Pharmacy
- The Pharmacy Course
- The Short Course in Pharmacy

College of Law

The Agricultural Experiment Station

GENERAL STATEMENT

The College of Arts and Sciences, the College of Agriculture, the College of Technology, and the College of Pharmacy offer four years' courses leading to the bachelor's degree. They have the following requirements in common for graduation:

1. English, one year, five hours a week, or the equivalent divided between two years.

2. Mathematics, one year, five hours a week.

3. Science (chemistry, physics, or biology), one year, five hours a week, of which time an important part must be occupied with laboratory work.

4. Language (Greek, Latin, German, French), the equivalent of one year, five hours a week. The requirement for Latin is fulfilled by completing Lt 1 and Lt 2; and for Greek by completing Gk 1 and Gk 2. A student beginning German or French must receive at least two credits in the subject to count it toward a degree.

5. Military Science and Tactics, one year, five hours a week.

The science requirement demands a year's work in some one science, and is not fulfilled by fractions of a year's work in two or more sciences. In making up the language requirement, work done in preparation for college may be counted, but two years' preparatory study will be reckoned as one year of college work.

Twenty-five credits (one credit is given for a recitation course that meets five hours a week, or for a laboratory course that meets ten hours a week, for one half year) are required for graduation in the College of Arts and Sciences; thirty credits are required for graduation in the College of Technology, the College of Agriculture, and the College of Pharmacy.

Requirements in detail are printed under each college.

COLLEGE OF ARTS AND SCIENCES

FACULTY OF INSTRUCTION

GEORGE EMORY FELLOWS, PH. D., L. H. D., LL. D.
President of the University
JAMES STACY STEVENS, M. S., LL. D.
Dean and Professor of Physics
MERRITT CALDWELL FERNALD, PH. D., LL. D.
Professor of Philosophy
ALFRED BELLAMY AUBERT, M. S. *Professor of Chemistry*
*ALLEN ELLINGTON ROGERS, M. A. *Professor of Civics*
LUCIUS HERBERT MERRILL, B. S.
Professor of Biological and Agricultural Chemistry
JAMES NORRIS HART, C. E., M. S.
Professor of Mathematics and Astronomy
FREMONT LINCOLN RUSSELL, B. S., V. S. *Professor of Biology*
HORACE MELVYN ESTABROOKE, M. A. *Professor of English*
JOHN HOMER HUDDILSTON, PH. D. *Professor of Greek*
GILMAN ARTHUR DREW, PH. D. *Professor of Biology*
RALPH KNEELAND JONES, B. S. *Librarian*
JACOB BERNARD SEGALL, PH. D.
Professor of Romance Languages
GEORGE DAVIS CHASE, PH. D. *Professor of Latin*
CAROLINE COLVIN, PH. D. *Professor of History*
CHARLES DAVIDSON, PH. D. *Professor of Education*
JOSEPH WILLIAM CARR, PH. D. *Professor of Germanic Languages*
ROBERT JAMES SPRAGUE, PH. D.
Professor of Economics and Sociology
WALTER STEVENS BROWN
Professor of Military Science and Tactics
MINTIN ASBURY CHRYSLER, PH. D.
Associate Professor of Botany
*GUY ANDREW THOMPSON, M. A. *Assistant Professor of English*
GEORGE RUFUS WHEELER, M. A.
Acting Assistant Professor of English
HARLEY RICHARD WILLARD, M. A.
Assistant Professor of Mathematics

* Absent on leave.

ANDREW PAUL RAGGIO, PH. D.
Assistant Professor of Romance Languages
LINCOLN WARE RIDDLE, PH. D.
Instructor in Botany (Summer Term)
FRANK FLETCHER STEPHENS, PH. D.
Instructor in History (Summer Term)
LAURIE LORENZO BURGESS, M. S.
Instructor in Chemistry (Summer Term)
WALTER EVERETT PRINCE, M. A. *Instructor in English*
PERCY LORING REYNOLDS, M. D.
Physical Director and University Physician
ELMER EARL MOOTS, B. C. E. *Instructor in Mathematics*
WINDSOR PRATT DAGGETT, PH. B. *Instructor in Public Speaking*
HENRY WALTER BEARCE, B. S. *Instructor in Physics*
DAYTON JAMES EDWARDS, B. S. *Instructor in Biology*
ROBERT EDMOND CLAYTON, B. S. *Instructor in Chemistry*
GLADYS ETHEL FELLOWS, B. A.
Instructor in Romance Languages
JAMES SEYMOUR, PH. G., B. S. *Instructor in Chemistry*
HENRY LEWIS SWEET, B. A. *Instructor in Mathematics*
WILLIS FLYE WASHBURN, B. S. *Instructor in Chemistry*
CHARLES SYLVESTER RIDGWAY, B. S. *Instructor in Biology*
LOWELL JACOB REED, B. S. *Instructor in Mathematics and Physics*
GEORGE EDWARD PEARSON, M. A. *Instructor in English*
CARLETON CHASE MURDOCK, B. A. *Tutor in Physics*

GENERAL INFORMATION

THE COLLEGE OF ARTS AND SCIENCES comprises:
The Bachelor of Arts Courses
The Bachelor of Science Courses
The Summer Term

The College of Arts and Sciences offers a course of liberal training equivalent to that of the standard New England College. It designs particularly to meet the needs of three classes of students:

1. Men and women who desire to complete their studies with a course in general culture.

2. Men and women who desire to enter professional schools which require a collegiate degree. The B. A. degree of the University of Maine is accepted as of the first rank at the graduate departments of our best universities.

3. Men and women who wish to fit themselves for the profession of teachers in secondary schools, or for school superintendencies.

ADMISSION

The requirements for admission are given in full on pages 45-51; they are practically the same as for other New England Colleges and may be met by a four years' preparatory course in a good high school or academy.

FRESHMAN STUDIES

The work of the first year is conditioned somewhat on the subjects offered for admission. Mathematics, which is required of all students, may best be taken in the Freshman year. Other subjects recommended for the Freshman year are English, French or German, chemistry, and drawing.

MAJOR INSTRUCTORS

Each student must select, in some one department, work to be pursued three or four years, five recitations a week. Any one of the following departments may be chosen for major work: biology (including zoölogy, botany, physiology, and entomology), chemistry, civics, English, German, Greek, history, Latin, mathematics and astronomy, psychology (including education), physics, philosophy, Romance languages (including French, Spanish, and Italian).

In many cases the selection of a major subject need not be made before the beginning of the sophomore year. A student may change his major subject with the consent of the professors in charge of the department which he leaves and the one which he wishes to enter; but no student will be graduated who has not finished all the work required for graduation in some one department, no matter how much work he may have done in other departments. The major subject must include work counting not less than six, nor more than eight credits. In the case of departments in which less work is offered than amounts to six credits, this amount must be made up from such other related departments as the professor under whose direction the major is taken may prescribe. The remainder of the student's work may be selected from any department or departments of the University. This must be done with the advice of the head of the department in which the student has chosen his major subject, that it may bear some useful relation to his other work.

The head of the department in which the student has chosen his major subject becomes his major instructor, and during the remainder of the

course this instructor acts as chief adviser in all matters relating to the course, and is a representative of the student before the faculty.

THE BACHELOR OF ARTS COURSES

The work in the College of Arts and Sciences leads first to the degree of Bachelor of Arts (B. A.). The course is a 25 point course (see page 36), and is regularly completed in four years; but a bright student of exceptional preparation and application may complete the requirements in three years. Students fitting themselves for professional or technical schools are often encouraged to do this, but prospective teachers are recommended to spend four years on their college course.

THE BACHELOR OF SCIENCE COURSES

These courses are arranged for those who seek a broad general training, based largely upon the study of some one subject as a major, with the remainder of the work selected from the wide range of subjects offered at the University.

At graduation the student receives the degree of Bachelor of Science. Upon the completion of one year's prescribed work in residence, including the presentation of a satisfactory thesis and examination at the University, he receives the degree of Master of Science.

No outline of the courses in the College of Arts and Sciences is given in the catalog, but students may have such an outline presented to them by applying to the professor in charge of the department in which they are interested. Groups of studies may be made up which would be desirable for students intending to prepare for teaching, or to enter upon the study of law, medicine, or theology.

GRADUATE COURSES

The candidate for the degree of Master of Arts or Master of Science must have received the corresponding bachelor's degree from this institution or one granting a fully equivalent degree.

At least one year must elapse between the conferring of the bachelor's and master's degree.

No work done before the conferring of the bachelor's degree can be counted towards the master's degree.

The candidate shall devote at least one year to graduate resident study and shall complete work of the equivalent of six credits or fifteen hours per week throughout a college year.

The course of study shall be submitted to and approved by the committee on graduate degrees.

The course of study shall consist of work in one major department or subject in which the candidate has already pursued undergraduate study for at least two years, and work in not more than two minor subjects which bears a distinct relation to the general plan or purpose of his major subject.

At least three-fifths of the work must be done in the major subject.

All of the work must be of advanced grade and must be tested by examinations which the candidate must pass with distinction.

The candidate shall prepare as a part of his course of study a satisfactory thesis on some topic connected with his major subject which may count for not more than three of the required fifteen hours.

THE SUMMER TERM

General Information

The summer term of the University of Maine is not a summer school, but so far as is practicable the work is coördinate with that of the remainder of the year. The majority of the courses offered are of college grade and, when completed, entitle the student to full credit on the university books. There are no examinations for admission, and students are permitted to enter any class in which they can satisfactorily carry on the work. Before counting this work toward a collegiate degree, the college entrance conditions must be met.

Three classes of students may be benefited by the work of this term:

1. Teachers in the high schools and grammar schools who wish to fit themselves for more advanced positions. A small expenditure of time and money in the summer vacation may be the means of securing a more desirable position. School superintendents are coming to discriminate in favor of those teachers who advance in their work.
2. College students who may wish to anticipate work in their course, or who may have back work in arrears. A student should be able to make one credit (the equivalent of a five hours' study for eighteen weeks) during the summer term.
3. Courses in physics, chemistry, mathematics, and Latin are offered covering the work of the high school. In this way a student who is slightly deficient at the end of the school year may prepare himself for college. These courses give no credit on the University books. So far as possible the recitations are placed in the forenoon and the special lectures in the evening, leaving the afternoons free for study and recreation.

Courses of Study

During the summer of 1907 courses were offered in the following subjects: Botany, Chemistry, Education, English, French, German, History, Latin, Mathematics and Physics. These courses are described in connection with the courses offered at the University during the remainder of the year.

Lectures, 1907

President G. E. Fellows, The Problem of the State University
Hon. Payson Smith, State Superintendent of Schools, The Educational Outlook
Professor G. D. Chase, Words
Professor Charles Davidson, The Next Step in Education

Vesper Services

A brief religious service is conducted each Sunday afternoon at 4.00 P. M. in the Art Building. This consists of a song service and a brief address.

Library

Throughout the summer term the University library of 27,000 volumes and the reading room, containing about three hundred periodicals and the Maine daily papers, will be open from 9.00 A. M. to 12 M., and from 2.00 to 5.00 P. M. daily, except Saturday afternoon and Sunday.

The library privileges ordinarily accorded to University students, including the home use of books, will be extended to students in the summer courses.

Laboratories, Museums, and Observatory

The laboratories belonging to the departments of physics, chemistry, and botany will be available for use of the students. In the physical laboratory there is ample provision for carrying on the various courses from the preparatory work to that of the graduate student in the University. All necessary apparatus is supplied to the student without charge.

In the chemical laboratory a small charge is made to cover the cost of the articles used. The department is well equipped with modern apparatus.

The botanical laboratory is in charge of the professor of biology. The student is furnished with microscope, specimens, and preparations for advanced work.

The museum is illustrative of the rocks and fauna of Maine, and will be open at stated periods for the use of the students.

The observatory contains an eight-inch telescope, vertical circle, and other instruments of precision. The work of the observatory will be explained by Professor Hart in an evening lecture.

Expenses

Tuition for the term of five weeks, covering all charges for instruction in any number of courses that the student may elect, use of library and laboratories, except a small additional fee for those taking laboratory chemistry:

For residents of Maine, $12.00.

For residents of other states, $18.00.

Board and room in any of the University buildings, including light, and necessary furniture, $20.00 for the term, payable in advance.

Recreation

Most of the class work is held during the forenoon, leaving the afternoon and evening free for study and recreation.

On the campus are several excellent tennis courts. The neighboring country affords many attractive excursions, on foot, by bicycle, carriage, or electric cars. Maine's famous seaside resort, Bar Harbor, is but one and one-half hours distant by rail, while Mount Kineo and Moosehead Lake are at only a slightly greater distance and easily accessible.

Within easy riding or wheeling distance are Lakes Pushaw and Chemo, as well as several attractive mountains.

In General

Prospective students are invited to consult Dean Stevens, who is in charge of the Summer session, or any of the other instructors, for further details regarding any of the courses, or upon any subject relating to the work. It is the wish of the authorities to offer such courses as will best appeal to the teachers of Maine and others who desire to avail themselves of these privileges.

If there should be a considerable demand for other studies than those named, arrangements will be made to provide for them as far as practicable. In case the registration for any course offered falls below a certain minimum, it may be withdrawn. The list of instructors and the courses outlined in this catalog were for the summer of 1907. Unimportant changes are likely to be made for the coming term.

DEPARTMENT OF EDUCATION

Advisory Courses

For students who are preparing to teach in Secondary Schools the following courses have been arranged for (1) teachers of English, (2) teachers of Latin, (3) teachers of Modern Languages, (4) teachers of Mathematics, (5) teachers of Physical Sciences, (6) teachers of Natural Sciences, (7) teachers of Agriculture. These courses are advisory only, and election must be made subject to the requirements of the time schedule, but it is believed that they will be of assistance in determining the relative importance of subjects aside from the major subject chosen.

Freshmen are advised to take the required subjects with the following additions: for (1), any language, preferably Latin, and Hy 1 and 2; for (2), Lt 1 and 2 and one science; for (3), the modern language not taken in preparation and Lt 1 and 2; for (4), Gm 1 and 2 and Ch 1, 2, 3, and 4; for (5), and (7), a modern language and Ch 1, 2, 3, and 4; for (6), a modern language and Bl 1, 2, 21, 22.

For upper classmen, the following electives are advised:

For Teachers of English:

Sophomore Year

First semester: Eh 2a, 6, 8; Gm 3a or 1; Rm 3a or 1; Ch 1, 3; Hy 3; Ed 1.

Second semester: Eh 2b, 7, 9; Gm 3b or 2; Rm 3b or 2; Ch 2, 4; Hy 4; Ed 2.

Junior Year

First semester: Eh 10, 12, 15, 17; Ed 3; Ec 1; Pl 1.

Second semester: Eh 11, 13, 14; Ed 4; Ec 2; Bl 9.

Senior Year

First semester: Eh 19, 20, 22; Ed 5; Hy 7; Pl 3.

Second semester: Eh 21, 23, English course on secondary requirements: Ed 6, 8; Hy 8; Pl 4.

For Teachers of Latin:

Sophomore Year

First semester: Lt 3, 6; Eh 2a, 6; second year of modern language; Hy 1; Ed 1; mathematics or science.

Second semester: Lt 4, 6; Eh 2b, 7; second year of modern language; Hy 2; Ed 2; mathematics or science.

Junior Year

First semester: Lt 7, 9, 6, 11; third year of modern language; Ec 1; Ed 3.

Second semester: Lt 8, 10, 6, 12; third year of modern language; Ec 2; Ed 4.

Senior Year

First semester: Lt 15, 19a, 18, 13; Eh 8; third year of modern language; Pl 1; Ed 5.

Second semester: Lt 16, 19b, 20, 21, 14, review of secondary texts; Pl 2; Ed 6, 8.

For Teachers of Modern Languages:

Sophomore Year

First semester: Gm 3a; Rm 3a; Lt 3; Eh 2a, 6; Hy 1; mathematics or science.

Second semester: Gm 3b; Rm 3b; Lt 4; Eh 2b, 7; Hy 2; mathematics or science.

Junior Year

First semester: Gm 4a, 5a, 6a; Rm 4a, 5a; Ed 1; Ec 3.

Second semester: Gm 4b, 5b, 6b; Rm 4b, 5b; Ed 2, Ec 8.

Senior Year

First semester: Gm 7a, 8a; Rm 6a, 7a, Spanish or Italian; Pl 1 or Hy 5; Ed 5.

Second semester: Gm 7b, 8b; Rm 6b, 7b, Spanish or Italian; Pl 2 or Hy 6; Ed 8.

For Teachers of Mathematics:

Sophomore Year

First semester: Ms 6b, 7; Eh 2a; Gm 3a; Ps 1; Md 1; Ed 1.

Second semester: Ms 8; Eh 2b; Gm 3b; Ps 2, 5; Md 2; Ed 2.

Junior Year

First semester: Ms 19, 20 or 12; Rm 1 or 3a; Ps 8, or Ps 19; Ed 3; Pl 1.

Second semester: Ms 11, 9, 15 or 13; Rm 2 or 3b; Ed 4; Pl 2.

Senior Year

First semester: Ms 10, 12 or 20; Ec 1; Hy 7; Ed 5.

Second semester: Ms 13 or 15, review of secondary mathematics with methods; Ps 9; Hy 8.

For Teachers of Physical Sciences:

Sophomore Year

First semester: Ch 5, 14; Gm 3a or Rm 3a; Ms 6b, 7; Eh 2a; **Ed 1.**
Second semester: Ch 6, 15; Ms 8; Gm 3b or Rm 3b; Eh 2b; **Ed 2.**

Junior Year

First semester: Ch 7; Ps 1; Bl 1, 2; Eh 8; Ed 3.
Second semester: Ch 8; Ps 2, 5; Bl 21, 22; Eh 9; Ed 3.

Senior Year

First semester: Ch 16; Ps 8, 9, 14; Ec 7; Hy 7; Ed 5.
Second semester: Ch 18; Ps 10 or 7; Ps 3, method for secondary schools; Ec 8; Hy 8; Ed 8.

For Teachers of Natural Sciences:

Sophomore Year

First semester: Bl 3a, 9, 23, 24; Ch 1, 3; Eh 2a; Gm 4a, or Rm 4a; Ed 1; Md 1.
Second semester: Bl 3b, 5, 6; Ch 2, 4; Eh 2b; Gm 4b or Rm 4b; Ed 2; Md 2.

Junior Year

First semester: Bl 25, 26, 7, 8; Eh 6; Ps 12; Ed 3.
Second semester: Bl 10 and 11, 27 and 28, 18, or 37; Eh 7; Ps 5; Ed 4.

Bl 10 and 11 or 27 and 28.

Senior Year

First semester: Elective biology; Ec 3; Ed 5; Eh 8; Hy 7.
Second semester: Bl 12, 13, elective biology; Ec 6; Eh 9; Ed 8; Hy 8.

Note.—As a preparation for the course in Latin, students should have taken four years of Latin and either three years of Greek or two of one modern language and one of another in the secondary school. If the student desires to prepare to teach both Greek and Latin, he should take three years of Greek and four of Latin in college. If he would omit Greek, he should take one year of the modern language in which he had most credits when he entered and two of another.

COLLEGE OF AGRICULTURE

FACULTY OF INSTRUCTION

GEORGE EMORY FELLOWS, PH. D., L. H. D., LL. D.
President of the University
WILLIAM DANIEL HURD, B. S. *Dean and Professor of Agronomy*
ALFRED BELLAMY AUBERT, M. S. *Professor of Chemistry*
LUCIUS HERBERT MERRILL, B. S.
Professor of Biological and Agricultural Chemistry
JAMES NORRIS HART, C. E., M. S.
Professor of Mathematics and Astronomy
FREMONT LINCOLN RUSSELL, B. S., V. S. *Professor of Biology*
HORACE MELVYN ESTABROOKE, M. A. *Professor of English*
GILMAN ARTHUR DREW, PH. D. *Professor of Biology*
RALPH KNEELAND JONES, B. S. *Librarian*
WALTER STEVENS BROWN
Professor of Military Science and Tactics
JACOB BERNARD SEGALL, PH. D.
Professor of Romance Languages
GORDON EDWIN TOWER, B. S., M. F. *Professor of Forestry*
JOSEPH WILLIAM CARR, PH. D.
Professor of Germanic Languages
CHARLES PARTRIDGE WESTON, C. E., M. A.
Professor of Mechanics and Drawing
PERCY ANDERSON CAMPBELL, M. S. A.
Professor of Animal Industry
MINTIN ASBURY CHRYSLER, PH. D.
Associate Professor of Botany
GEORGE RUFUS WHEELER, M. A.
Acting Assistant Professor of English
ANDREW PAUL RAGGIO, PH. D.
Assistant Professor of Romance Languages
HERMAN BECKENSTRATER, M. S.
Assistant Professor of Horticulture
JAMES EDGAR McCLINTOCK, B. S.
In Charge of Agricultural Extension Work
HARLEY RICHARD WILLARD, M. A.
Assistant Professor of Mathematics
EARNEST DAVID WAID, B. Sc. *Assistant Professor of Agronomy*

ARCHER LEWIS GROVER, B. S. *Instructor in Drawing*
WALTER EVERETT PRINCE, M. A. *Instructor in English*
PERCY LORING REYNOLDS, M. D.
Physical Director and University Physician
ELMER EARL MOOTS, B. C. E. *Instructor in Mathematics*
WINDSOR PRATT DAGGETT, PH. B. *Instructor in Public Speaking*
HENRY WALTER BEARCE, B. S. *Instructor in Physics*
DAYTON JAMES EDWARDS, B. S. *Instructor in Biology*
GLADYS ETHEL FELLOWS, B. A. *Instructor in Romance Languages*
JAMES SEYMOUR, PH. C., B. S. *Instructor in Chemistry*
HENRY LEWIS SWEET, B. A. *Instructor in Mathematics*
WILLIS FLYE WASHBURN, B. S. *Instructor in Chemistry*
CHARLES SYLVESTER RIDGWAY, B. S. *Instructor in Biology*
LOWELL JACOB REED, B. S. *Instructor in Mathematics and Physics*
GEORGE EDWARD PEARSON, M. A. *Instructor in English*
CHARLES HENRY SAMPSON, B. S. *Tutor in Drawing*

GENERAL INFORMATION

The College of Agriculture comprises the departments of Agronomy, Animal Industry, Horticulture, Extension Work, and Forestry, and includes courses in nearly all of the natural sciences, agricultural chemistry, biological chemistry, veterinary science, and bacteriology. The aim of the College is to prepare young men to become farmers, teachers of agriculture and sciences in schools and colleges, investigators of agricultural subjects in the United States Department of Agriculture, experiment station workers, foresters, and practical men. Tuition is free except in the course in forestry.

The courses of instruction are organized as follows:

1. THE REGULAR COURSES:
   - The four years general course in Agronomy, Animal Industry, and Horticulture
   - The four years course for teachers in Elementary Agriculture
   - The special courses in Agronomy, Animal Industry, and Horticulture
   - The course in Forestry
   - The two years School Course in Agriculture
   - The short winter courses in Agronomy, Animal Industry, and Horticulture
   - The two weeks course in Poultry Management
   - Farmers' week

2. The Extension Courses:
   The Correspondence courses
   The Lecture courses
   The Demonstration work

The College Courses

The college courses are designed for those who wish to follow agriculture, animal and dairy husbandry, or horticulture, as a business, or who purpose to become teachers or investigators in related sciences. The instruction is arranged with a view to emphasize fundamental principles and to give the student the largest amount of technical knowledge consistent therewith. To this end the theoretical instruction is associated with practical work and observation on the farm, in the orchard and garden, and in the various laboratories of the University; but time is not consumed in purely manual operations.

Certain studies are fundamental to all work in agricultural lines and these are included among the subjects required in the four-year courses. After these fundamental subjects are completed, opportunity for election is given.

The following course, embracing 30 credits, is the required course for four years agricultural students. It is recommended that the subjects be taken in the order stated in the course. The elective subjects are selected with the advice of the major instructor.

A course for those who intend to become teachers of elementary agriculture in the public schools is to be found following the regular course.

The Four Years' Course in Agronomy, Animal Industry, and Horticulture

FRESHMAN YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Ag 1, Soils	2	An 1, Animal Breeding	2
Ag 2, Lab. Soils † 2	1	An 2, Stock Judging † 2	1
Bl 1 & 2, Biology	3	Bl 21 & 22, Botany	4
Ch 1 & 3, Chemistry	3	Ch 2 & 4, Chemistry	4
Eh 1 & 3, English	4	Eh 1 & 4, English	4
Md 1, Drawing † 4	2	Mt 1, Military † 5	2½
Mt 1, Military † 5	2½		17½
	17½		

SOPHOMORE YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Ag 3, Agr. Engineering †4	2	Ag 4, Fertilizers	2
An 3, Animal Breeding	2	Bl 15, Veterinary Science	2
An 4, Stock Judging †2	1	Eh 2, English	2
Ch 14, Qualitative Analysis †8	4	Ht 1, Principles of Fruit Growing	2
Eh 2, English	1	Modern Language	2
Modern Language	3	Ms 1, Solid Geometry / Ms 4, Plane Trigonometry	5
Ms 2, Algebra	5	Fy 1, General Forestry	2
Bl 9, Physiology	2	Pt, Physical Training	⅔
Pt, Physical Training	⅔		17⅔
	20⅔		

JUNIOR YEAR

Ag 5, Farm Crops	2	An 7, Dairying	2
Ag 5a, Lab. Crops †2	1	An 8, Lab. Dairying *3	1
An 5, Animal Feeding	2	Bl 17, Bacteriology	2
An 6, Dairying †2	1	Bc 2, Lab. Biological Chemistry	3
Ht 2, Pomology	2	Bc 3, Agricultural Chemistry	5
Ht 3, Lab. Pomology †2	1	Ht 4, Vegetable Gardening	2
Bc 1, Biological Chemistry	5	Ht 5, Handicraft †4	2
Modern Language	3	Ht 6, Insecticides & Fungicides	1
Bl 29, Farm Botany	2	Modern Language	2
Bl 30, Lab. Farm Botany †2	1	Pt, Physical Training	⅔
Pt, Physical Training	⅔		20⅔
	20⅔		

SENIOR YEAR

Advanced Agronomy, Animal Industry or Horticulture	3	Advanced Agronomy, Animal Industry or Horticulture	3
Fy 2, Farm Forestry	1	Bl 16, Veterinary Science	2
Fy 3, Field Farm Forestry *3	1	Thesis (at least)	3
Thesis (at least)	3	Elective	9
Elective	10		17
	18		

The following subjects are included in a major in Agriculture:

Ag 1 to 6, Agronomy	2	credits
An 1 to 8 Inclusive, Animal Industry	2 5-10	credits
Ht 1 to 6, Inclusive, Horticulture	2	credits
Bl 15 and 16, Veterinary Science	4-5	credit
Bc 1 and 2, Biological Chemistry	1 3-5	credits
Fy 1, 2, and 3, Forestry	4-5	credit
Bc 3, Agricultural Chemistry	1	credit
Bl 17, Bacteriology	2	credits
Total	12 7-10	credits

At graduation the student receives the degree of Bachelor of Science. Upon completion of graduate work as prescribed by the University, and the presentation of a satisfactory thesis, he receives the degree of Master of Science.

Course in Agriculture for Those Who Intend to Become Teachers of This Subject in the Public Schools

This course is offered in response to a call for teachers capable of teaching elementary agriculture in schools and academies. In order to receive a degree 150 hours, or 30 credits, must be received. The following course as laid down covers 146 hours. The remaining 6 hours have been purposely left open for elective work in order that the student may receive as liberal a training in cultural studies, as is consistent with the amount of technical work necessary. It is recommended that the electives be taken from the departments of biology, history, economics, chemistry, physics, or English.

FRESHMAN YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Ch 1, Chemistry	2	Ch 2, Chemistry	3
Ch 2, Lab. Chemistry † 2	1	Ch 4, Lab. Chemistry † 2	1
Eh 1, Public Speaking	1	Eh 1, Public Speaking	1
Eh 3, English Composition	3	Eh 4, English Composition	3
Md 1, Drawing, * 6	2	Md 2, Drawing * 6	2
Modern Language	3	Modern Language	2
Ms 2, Algebra	5	Ms 1, Solid Geometry } Ms 4, Trignometry }	5
Mt 1, Military † 5	2½	Mt 1, Military † 5	2½
	19½		19½

SOPHOMORE YEAR

Fall Semester		*Spring Semester*	
Ag 1, Soils	2	Ag 4, Fertilizers	2
Ag 2, Soil Laboratory † 2	1	An 1, Animal Breeding	2
Bl 1, General Biology	2	An 2, Stock Judging † 2	1
Bl 2, Lab. Biology † 2	1	Bl 21, General Botany	2
Ch 14, Qualitative analysis † 8.	4	Bl 22, Lab. Botany † 4	2
Ed 1, History of Education	3	Ed 2, History of Education	2
Eh 2a, English	1	Ch 15, Qualitative Analysis † 8.	4
Me 1, Wood shop work † 4	2	Ht 1, Principles of Fruit Growing	2
Pt, Physical Training	⅔	Me 2, Forge Work † 4	2
Elective work	?	Pt, Physical Training	⅔
	16 ⅔		19 ⅔

JUNIOR YEAR

Ag 3, Agr. Engineering † 4	2	Ag 5, Farm Crops	2
An 3, Animal Breeding	2	Ag 5a, Lab. Crops † 2	1
An 4, Stock Judging † 2	1	Ht 4, Vegetable Gardening	2
Bl 9, Physiology	2	Ht 5, Handicraft † 4	2
Ed 5, General Methodology	3	Ed 8, Child Study	3
Ht 2, Pomology	2	Bl 15, Veterinary Science	2
Ht 3, Lab. Pomology † 2	1	Ag 11, School Gardening * 3	1
Modern Language	3	Modern Language	2
Pt, Physical Training	⅔	Pt, Physical Training	⅔
Elective work	?	Elective work	?
	16 ⅔		15 ⅔

SENIOR YEAR

An 5, Animal Breeding	2	An 7, Dairying	2
Bc 1, Biological Chemistry	5	An 8, Lab. Dairying * 3	1
Bl 29, Agricultural Botany	2	Bc 3, Agricultural Chemistry	5
Bl 30, Lab. Agl. Botany, † 2	1	Bl 10, Entomology	2
Ht 8, Landscape Gardening	2	Bl 11, Lab. Entomology † 4	2
Ps 12, Physics	5	Bl 16, Veterinary Science	2
Elective work	?	Bl 17, Bacteriology	2
	17	Fy 1, General Forestry	2
		Ps 5, Lab. Physics † 4	2
			20

† Two hours laboratory time counts one hour.

* Three hours laboratory time counts one hour.

The Special Courses in Agronomy, Animal Industry, and Horticulture

The Special Courses are designed for young men and women who cannot well spend four years in preparing themselves to become farmers, but who wish to secure special training in certain agricultural subjects. No fixed schedule of studies is prescribed, but students may elect along the line of horticulture, or dairying, or general farm crops and farm management.

For admission to this course applicants must be at least eighteen years of age, and must have a good common school education. No formal entrance examinations are required, but students will be admitted, upon recommendation of the Dean of the College after the professor in charge of the work elected shall have satisfied himself of the fitness of each candidate to take the studies desired.

The annual expenses for courses of one year or more are the same as those of students in the four years courses. *Tuition is free except in the course in forestry.*

The Two Years School Course in Agriculture

This is a course designed to train young men and women who wish to become practical farmers, farm superintendents, dairymen, or gardeners, but who cannot devote time to high school or college training.

The same equipment is used and the same instructors give the work as in the four years University course, but the work is of a more elementary nature. All the classes are separate and distinct from the four year classes, and in no case will college credit be allowed for work done in the school course.

There are no entrance examinations required of those who desire to enter the school course. Students over fifteen years of age who are prepared for advanced grammar or high school work are eligible for registration. No tuition is charged in this course but the same registration and incidental fees of fifteen dollars a term, or thirty dollars a year, are charged school course students in agriculture as are charged all others attending the University.

The practical side of the work in this course is strongly emphasized, and since students are excepted to be able to do work and handle men when they have finished, those taking this course are required to spend the summer vacation between the first and second years in work at the college, for which reasonable wages will be paid, or on some farm approved by the faculty.

On completion of the course a certificate is awarded those who have satisfactorily done the work.

The following is a schedule of the work given:

FIRST YEAR

Fall Semester	*Spring Semester*
Farm Crops and Farm Mechanics	Farm Crops and Farm Mechanics
Animal Industry	Animal Industry and Dairy Work
Orchard and Garden	Garden and Orchard
English	English
Business Arithmetic and Farm Accounts	Veterinary Science
Carpentry	Forge Work
Practical Dairying and Stock Management	Practical Dairying and Stock Management
Farm Practice and Laboratory Work	Farm Practice and Laboratory Work
Orchard and Garden Practice and Laboratory Work	Orchard and Garden Practice and Laboratory Work

SECOND YEAR

Farm Crops and Farm Mechanics	Farm Crops and Farm Mechanics
Animal Industry	Animal Industry
Orchard and Garden	Insects
Farm Chemistry	Forestry
Farm Botany	Veterinary Science
English	English
Farm Practice and Laboratory Work	Practical Dairying and Stock Management
Practical Dairying and Stock Management	Farm Practice and Laboratory Work
Orchard and Garden Practice and Laboratory Work	Orchard and Garden Practice and Laboratory Work

The Winter Courses

The winter courses in Dairying and General Agriculture are designed for practical farmers who wish some training which will enable them to be better farmers, fruit growers, dairymen, or poultrymen, but who cannot leave the farm at other seasons of the year. These courses also help fit men to be managers of farms, creameries, or cheese factories.

Special emphasis is given to dairying and if the course is pursued two terms and satisfactory work is performed for two seasons in a butter or cheese factory, the student will be granted a certificate of proficiency. These courses begin on the Tuesday following the Christmas recess and continue eight weeks.

The subjects of farm crops, fertilizers, orcharding, gardening, dairying, and butter making, stock breeding and feeding, poultry raising, and veterinary science, are treated in the most practical manner. Very few text-books are used, and the expenses for board and room, which are the only other expenses, are very moderate. A circular descriptive of this course is published each year and will be sent on request.

The Special Course in Poultry Management

This two weeks course is given each spring to aid persons who wish a practical knowledge in order to carry on poultry breeding and management. The time in the course is about equally divided between the handling of incubators and brooders, the feeding and rearing of young chicks, the general management of mature fowls, scoring and judging, and killing and marketing poultry. The work is given by means of lectures and practical demonstrations. The equipment available for instruction consists of three thousand laying and breeding birds, forty incubators, one hundred and twenty brooders, and such buildings as are provided for the poultry investigations of the Maine Experiment Station. The dates of the course vary somewhat from year to year and may be obtained upon application to the Dean of the College of Agriculture.

Farmers' Week

There are a large number of people who cannot come to the College for a great length of time, but who desire a few days of practical instruction. To reach and accommodate these, "Farmers' Week" is held. Lectures on practical agricultural subjects are given morning, afternoon, and evening. Practical demonstrations occupy a part of each afternoon. Besides the practical subjects discussed, one session is given up to problems of rural betterment, a section is arranged where Domestic Science for farmers' wives is taught. Dates and programs can be secured each year by addressing the Dean of the College of Agriculture.

The Department of Extension Work

Extension work in Agriculture embraces those forms of instruction, in subjects having to do with improved methods of agricultural production and with the general welfare of the rural population, that are offered to people not enrolled as resident students in educational institutions.

This work is intended to help persons directly on the farm and in the home; to aid those who desire definite instruction in practical agriculture, horticulture, and animal industry, but who cannot take a long or regular course at the University. It supplements the teaching and experimenting of the College of Agriculture and the Experiment Station. It is professedly a popular work, because it endeavors to aid the farmer to solve the practical problems of the farm, to quicken agricultural work, and to inspire greater interest in country life.

This department of the College of Agriculture offers correspondence courses, lecture courses, and demonstration work.

Correspondence Courses

These courses are given by means of text-books and free publications, either furnished by the College or procured from the U. S. Department of Agriculture, or from the various Experiment Stations. The text-books are furnished at publishers' prices. The courses are free and may be taken by individuals, granges, reading circles, or other organizations.

The following courses are offered:

Course 1.—Farm Crops and Crop Production.

Course 2.—Farm Management, Farm Machinery, and Field Engineering.

Course 3.—Feeding and Breeding of Farm Animals and Dairying.

Course 4.—Poultry Management.

Course 5.—Fruit Growing and Vegetable Gardening.

Course 6.—Forestry.

Course 7.—Home Economics.

Course 8.—Nature Study.

More definite information will be sent upon request.

Lecture Courses

The College of Agriculture will send members of the faculty to speak at grange meetings, farmers' institutes, and other gatherings, if the traveling expenses of the lecturer are paid by those holding the meeting.

Demonstration Work

The College of Agriculture will send members of the Faculty who will make demonstrations, showing as well as telling, how to solve many practical farm problems. These demonstrations are made on the farms and in the barns of the farmer, and are offered under the same conditions as the lectures.

The following is a partial list of the demonstrations that may be secured: Home Mixing of Fertilizers; Milk Testing (Use of Babcock Tester); Stock Judging; Potato Spraying; Fruit Spraying; Pruning and Grafting.

Circulars giving full information upon this subject will be sent upon request.

Besides the Demonstration work, Correspondence, and Lecture Courses, the College of Agriculture welcomes all kinds of correspondence on practical farm topics. If information is desired along lines relating to crops, fertilizers, dairy work, feeding, or orcharding and gardening, the various instructors are ready to give such assistance as they are able.

The Forestry Course

A complete undergraduate course in forestry is arranged, which may serve as the basis not only of practical work in forestry, but also of a liberal education. A knowledge of the principles of forestry in its different branches is given to the student, and some practice work is done in the forest. For students of agriculture this course offers work which will give a training in the management of the farmer's woodlot.

The instruction in this department consists of lectures, recitations, laboratory, and field work. The woodland belonging to the University, together with adjacent land covered by a young forest, furnishes a field for the study of many forest problems.

Requirements for Graduation

Freshman Year

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Bl 1, General Biology	2	Bl 21, General Botany	2
Bl 2, Lab. Biology † 2	1	Bl 22, Lab. Botany † 4	2
Eh 1, Public Speaking	1	Eh 1, Public Speaking	1
Eh 3, English Composition	3	Eh 4, English Composition	3
Md 1, Drawing † 4	2	Fy 1, General Forestry	2
Ms 2, Algebra	5	Md 2, Mechanical Drawing † 4	2
Mt 1, Military † 5	2½	Ms 6a, Analytic Geometry / Ms 4, Trigonometry	5
Modern Language	3	Mt 1, Military † 5	2½
		Modern Language	2
	19½		21½

SOPHOMORE YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Ag 1, Soils	**2**	Bl 27, Plant Physiology	2
Ag 2, Lab. Soils † 2	1	Bl 28, Lab. Plant Physiology † 4	2
Bl 23, General Botany	2	Bl 40, Forest Botany	2
Bl 24, Lab. Botany † 4	2	Bl 41, Lab. Forest Botany † 4	2
Bl 38, Forest Botany	2	Ce 2b, Plotting, 12 weeks * 4	1 ⅔
Bl 39, Lab. Forest Botany † 4	2	Ce 2c, Field Work, last 6 weeks * 6	
Ce 1a, Plane Surveying, 3 hours, 12 weeks	1 ½	Ch 2, Chemistry	3
Ce 2a, Plane Surveying, 1 hour, 6 weeks * 6	⅔	Ch 4, Lab. Chemistry † 2	1
Ch 1, General Chemistry	2	Eh 2, English Composition	1
Ch 3, Lab. Chemistry † 2	1	Modern Language	3
Eh 2, English Composition	1	Pt Physical Training	⅔
Modern Language	3		18 ½
Pt Physical Training	⅔		
	20 ⅔		

JUNIOR YEAR

Bc 3, Geology	3	Bl 10, Entomology	2
Bl 9, Physiology	2	Bl 11, Lab. Entomology † 4	2
Bl 25, Plant Histology	2	Bl 31, Plant Pathology	2
Bl 26, Lab. Plant Histology † 4	2	Bl 32, Lab. Plant Pathology † 4	2
Fy 6, Silviculture	2	Ce 9a, Higher Surveying	1
Fy 8, Silviculture, Field Work † 4	2	Ce 9b, Higher Surveying, Field Work	2
Pt Physical Training	⅔	Fy 7, Silviculture	2
Electives	5	Fy 9, Silviculture, Field Work † 4	2
	18 ⅔	Pt Physical Training	⅔
		Electives	2
			17 ⅔

SENIOR YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Bl 42, Forest Zoology	2	Fy 4, Lab. Forest Measurements †2	1
Fy 10, Forest Measurements	1½	Fy 5, Lab. Measurements †2	1
Fy 11, Forest Measurements, Field Work †4	2	Fy 13, Forest Management	1
Fy 12, Lumbering	3½	Fy 14, Thesis †10	5
Electives	8	Electives	9
	17		17

ELECTIVES

Bl 3, Mammalogy	2	Bl 3a, Ornithology	2
Bl 4, Bacteriology	1	Bl 7, Zoölogy	
Bl 5, Zoölogy	2	Bl 8, Lab. Zoölogy †4	2
Bl 6, Lab. Zoölogy †3	1½	Bl 15 or 16, Veterinary Science	2 or 3
Bl 37, Advanced Botany		Bl 17, Lab. Bacteriology †10	5
Ce 4, Railroad Work †6	3	Bl 37, Advanced Botany	
Ce 8, Sanitary Engineering	2	Ce 16, Hydraulics	3
Ce 11, Hydraulic, Field Work †4	2	Ce 17, Hydraulic Engineering	2
Ce 16, Hydraulic Engineering	2	Ch 8, Elementary Organic	2
Ce 18, Sanitary Engineering	1	Ch 13, Mineralogy	3
Ch 7, Elementary Organic	3	Ch 15, Qualitative Analysis †8	4
Ch 14, Qualitative Analysis †8	4	Ch 18, Quantitative Analysis †8	4
Ch 16, Quantitative Analysis †8	4	Ch 29, Agricultural Chemistry	4
Eh 17, Forensic Writing	8	Ec 6, Business Law	3
German		German	
History		History	
French		French	
Md 9, Methods of Drawing †4	2	Ms 8, Integral Calculus	5
Ms 7, Differential Calculus	5	Ms 11, Advanced Algebra	3
Ps 12, General Physics	5	Pl 2, Logic	3
Me 1, Wood Work †4	2	Me 2, Forge Work †4	2

At graduation the student receives the degree of Bachelor of Science. Upon the completion of one year's prescribed graduate work in residence, or two years work in absence, including the presentation of a satisfactory thesis and examination at the University, he receives the degree of Master of Science.

THE COLLEGE OF TECHNOLOGY

FACULTY OF INSTRUCTION

GEORGE EMORY FELLOWS, PH. D., L. H. D., LL. D.
President of the University

JAMES NORRIS HART, C. E., M. S.
Professor of Mathematics and Astronomy. Dean of the University

ALFRED BELLAMY AUBERT, M. S. *Professor of Chemistry*

LUCIUS HERBERT MERRILL, B. S.
Professor of Biological and Agricultural Chemistry

FREMONT LINCOLN RUSSELL, B. S., V. S. *Professor of Biology*

HORACE MELVYN ESTABROOKE, M. A. *Professor of English*

JAMES STACY STEVENS, M. S., LL. D. *Professor of Physics*

GILMAN ARTHUR DREW, PH. D. *Professor of Biology*

RALPH KNEELAND JONES, B. S. *Librarian*

JACOB BERNARD SEGALL, PH. D.
Professor of Romance Languages

HAROLD SHERBURNE BOARDMAN, C. E.
Professor of Civil Engineering

ARTHUR CRAWFORD JEWETT, B. S.
Professor of Mechanical Engineering

WALTER KIERSTED GANONG, B. Sc.
Professor of Electrical Engineering

JOSEPH WILLIAM CARR, PH. D.
Professor of Germanic Languages

ROBERT JAMES SPRAGUE, PH. D.
Professor of Economics and Sociology

WALTER STEVENS BROWN
Professor of Military Science and Tactics

CHARLES PARTRIDGE WESTON, C. E., M. A.
Professor of Mechanics and Drawing

GEORGE RUFUS WHEELER, M. A.
Acting Assistant Professor of English

CHARLES BARTO BROWN, C. E.
Assistant Professor of Civil Engineering

ANDREW PAUL RAGGIO, PH. D.
Assistant Professor of Romance Languages

WALTER MOLBRAY CURTIS, S. B.
Assistant Professor of Mechanical Engineering
HARLEY RICHARD WILLARD, M. A.
Assistant Professor of Mathematics
ARCHER LEWIS GROVER, B. S. *Instructor in Drawing*
EVERETT WILLARD DAVEE *Instructor in Wood and Iron Work*
WALTER EVERETT PRINCE, M. A. *Instructor in English*
PERCY LORING REYNOLDS, M. D.
Physical Director and University Physician
ELMER EARL MOOTS, B. C. E. *Instructor in Mathematics*
WINDSOR PRATT DAGGETT, PH. B. *Instructor in Public Speaking*
CHARLES JENKINS CARTER *Instructor in the Machine Shop*
GUSTAV FREDERICK WITTIG, B. S., E. E.
Instructor in Electrical Engineering
HENRY WALTER BEARCE, B. S. *Instructor in Physics*
DAYTON JAMES EDWARDS, B. S. *Instructor in Biology*
PAUL LEONARD BEAN, B. S. *Instructor in Civil Engineering*
ROBERT EDMUND CLAYTON, B. S. *Instructor in Chemistry*
GLADYS ETHEL FELLOWS, B. A. *Instructor in Romance Languages*
LESLIE IRVING JOHNSTONE, B. S. *Instructor in Civil Engineering*
JAMES SEYMOUR, PH. C., B. S. *Instructor in Chemistry*
HENRY LEWIS SWEET, B. A. *Instructor in Mathematics*
WILLIS FLYE WASHBURN, B. S. *Instructor in Chemistry*
LOWELL JACOB REED, B. S. *Instructor in Mathematics and Physics*
GEORGE EDWARD PEARSON, M. A. *Instructor in English*
ARTHUR RUSSELL LORD, B. S., *Tutor in Civil Engineering*
CARLETON CHASE MURDOCK, B. A. *Tutor in Physics*
CHARLES HENRY SAMPSON, B. S. *Tutor in Drawing*

The following executive committee of the Faculty of Instruction of the College of Technology is given power to arrange courses, act upon petitions, and transact general business relating to the technical time of the departments of engineering. The regular meetings of this body occur on the Tuesday preceeding the general faculty meeting at 4.30 P. M.

PROFESSOR BOARDMAN, *Chairman;* PROFESSOR GANONG, *Secretary;* PROFESSOR AUBERT, PROFESSOR JEWETT, PROFESSOR WESTON, ASSISTANT PROFESSOR BROWN, ASSISTANT PROFESSOR CURTIS, MR. GROVER, MR. WITTIG, MR. BEAN, MR .JOHNSTONE, MR. LORD.

GENERAL INFORMATION

The College of Technology provides technical instruction in chemistry, and in various branches of engineering, including forestry. The number of credits required for graduation in this college is thirty. In such technical courses it is necessary to prescribe a large proportion of the work; but some elective studies may be chosen in the junior and senior years. Under each of the courses described below is given a tabulated statement of the subjects pursued and the amount of work required. The college comprises:

The Chemical Course
The Chemical Engineering Course
The Civil Engineering Course
The Mechanical Engineering Course
The Electrical Engineering Course
The Mining Engineering Course

At graduation in any of these courses the student receives the degree of Bachelor of Science. The diploma indicates which course has been completed.

The Chemical Course

This course is designed for those who plan to become professional chemists and analysts, or teachers of chemistry. Attention is given to preparation for the work of the agricultural experiment station.

Lectures and recitations are closely associated with practical work in the laboratories. The student is drilled in the use of chemical apparatus, in accurate observation, and in careful interpretation of directions.

Eleven credits are required for the completion of the major, and a total of thirty for graduation.

Requirements for Graduation

FRESHMAN YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Rm 3a, French	3	Rm 3b, French	2
Eh 3, English Composition and Rhetoric	3	Eh 4, English Composition and Rhetoric	3
Ms 2, Algebra	5	Ms 4, Trigonometry	3
Ch 1, General Chemistry	2	Ms 6a, Analytical Geom	2
Ch 3, Lab. Chemistry †2	1	Ch 2, General Chemistry	3
Md 1, Drawing †4	2	Ch 4, Lab. Chemistry †2	1
Eh 1, Public Speaking	1	Eh 1, Public Speaking	1
Mt 1, Military †5	2½	Mt 1, Military †5	2½
	19½		17½

SOPHOMORE YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Gm 1, German	5	Gm 2, German	5
Ps 12, General Physics	5	Ps 5, Lab. Physics † 4	2
Ch 5, Advanced Inorganic Chemistry	2	Ch 6, Advanced Inorganic Chemistry	3
Ch 14, Qualitative Analysis † 8	4	Ch 15, Qualitative Analysis † 8	4
Eh 2, Themes	1	Eh 2, Themes	1
Bl 1, 2, General Biology	3	Elective	2
	20		17

JUNIOR YEAR

Gm 3a, German	3	Gm 3b, German	3
Ch 16, 18, Quant. Anal. † 12	6	Ch 8, Organic Chemistry	2
Ch 7, Organic Chemistry	3	Ch 19, Volumetric Analysis and Assaying † 15	7½
Ch 30, Biological Chemistry	5	Elective	6
Elective	2		
	19		18½

SENIOR YEAR

Ch 12, Chemical Preparations; Ch 20, Agricultural Analysis; Ch 21, Toxicology Urinalysis † 14	7	Ch 24b, Industrial Chemistry	2
Ch 23, Organic Chemistry	3	Ch 28, Dyeing; Ch 22, Thesis; Ch 25, Technical Analysis † 15	7½
Ch 24a, Industrial Chemistry	2	Ch 13, Chemical Equations	2
Bl 9, Physiology	2	Elective	5
Geology	3		16½
Elective	5		
	22		

At graduation the student receives the degree of Bachelor of Science. Upon the completion of one year's prescribed work in residence, or two years' in absence, including the presentation of a satisfactory thesis and examination at the University, he receives the degree of Master of Science.

The Chemical Engineering Course

This course is especially designed for those who intend to enter industries that require a more or less extensive knowledge of chemistry,

as well as of applied mathematics and some of the engineering studies, thus fitting them for positions as chemists or managers of manufacturing plants.

FRESHMAN YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Rm 3a, French	3	Rm 3b, French	2
Eh 3, English Composition and Rhetoric	3	Eh 4, English Composition and Rhetoric	3
Ms 2, Algebra	5	Ms 4, Trigonometry	3
Ch 1, General Chemistry	2	Ms 6a, Analytical Geom	2
Ch 3, Lab. Chemistry 2	1	Ch 2, General Chemistry	3
Md 1, Drawing 4	2	Ch 4, Lab. Chemistry 2	1
Eh 1, Public Speaking	1	Eh 1, Public Speaking	1
Mt 1, Military 5	2½	Md 2, Drawing 4	2
	19½	Mt 1, Military 5	2½
			19½

SOPHOMORE YEAR

Ch 5, Adv. Inorganic Chem	2	Ch 6, Adv. Inorganic Chem	3
Ch 14, Qual. Analysis 8	4	Ch 15, Qual. Analysis 8	4
Ps 1, Physics	5	Ps 2, Physics	3
Md 9, Drawing 4	1⅓	Ps 5, Lab. Physics 4	2
Modern Language	3	Modern Language	3
Ms 6b, Analytic Geometry	3	Ms 8, Calculus	5
Ms 7, Calculus	2	Physical Training 2	⅔
Physical Training	⅔		20⅔
	21		

JUNIOR YEAR

Ch 7, Elementary Organic Chem	3	Ch 8, Organic Chemistry	2
Ch 16 & 18, Quan. Analysis 8	4	Ch 19, Volumetric Analysis and Assaying 8	4
Me 1, Wood Work 4	1⅓	Me 4, Kinematics	3
Md 5, Mechanics	5	Me 10, Fuels	2
Physical Training 2	⅔	Md 6, Mechanics	5
Elective	3	Me 2, Forge Work 4	1⅓
	17	Physical Training 2	⅔
			18

SENIOR YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Ch 24a, Industrial Chem.	2	Ch 24b, Industrial Chem.	2
Ch 20 and 25, Agricultural and Technical Analysis	4	Ch 25b, Technical Analysis and Thesis Ch 22	4
Me 11, Steam Engineering	3	Me 5, Machine Work 4	1⅓
Me 26, Mechanical Lab. 3	1½	Ch 32, Physical Chemistry	2
Ee 10a, Electrical Development and Application	3	Elective	8
Ee 11a, Electrical Laboratory	2		17⅓
Elective	1½		
	17		

THE CIVIL ENGINEERING COURSE

The object of the course in Civil Engineering is to give the student as thorough a knowledge as possible of the principles underlying the profession. It is not possible in the time usually devoted to a college course to take up more than the most important technical subjects, hence the time devoted to those subjects designed to cultivate and broaden the mind is necessarily small. The attempt is made, however, to give the student not only a technical education, but to at least form the basis for a liberal one as well.

The attention of the student is directed to the fact that the scope of civil engineering is so broad that he may never expect to become expert in all of its branches, and that on the completion of his course he should obtain employment in that branch for which he seems best adapted.

It is impressed upon his mind that the granting of his bachelor's degree does not create him an engineer. It simply indicates that he has received the technical mental training which will fit him to follow the profession, and that he must begin at the bottom of the ladder of practice in order to obtain experience and judgment, without which he can never become successful.

The methods of instruction are recitations, lectures, original problems, work in the testing laboratories, field practice, and designing. Effort is made to acquaint the student with the best engineering practice, and with the standard engineering literature. During each year it is the practice to have several lectures by engineers from other institutions and from the engineering world. These lectures tend to increase the interest of the student, and to bring him in touch with men outside of his institution.

The engineering building contains recitation rooms, designing rooms, testing laboratories, drawing rooms, instrument rooms, and a filing and reference room, and is well equipped with apparatus.

The work of the first year is the same for all engineering students, especial attention being paid to mathematics and English. The technical work begins in the fall semester of the second year with field work and the study of surveying. This technical work is gradually increased, until the last year when it is nearly all professional. In the spring semester of the third year the student is required to choose between two optional lines of study. Option 1 consists of work in Hydraulic Engineering, while Option 2 consists of work in Railroad Engineering. The time devoted to each option is the same. Owing to the available facilities of the department not more than sixty per cent of the number of students in a class are allowed to select either option. A written statement is required from each student before the close of the fall semester giving his reasons for his selection. The head of the department reserves the right to make the final division.

The following subjects constitute the regular four years' course. Certain general subjects which are given as requirements, may, on presentation of satisfactory reasons to the head of the department, be omitted and others substituted.

Requirements for Graduation

FRESHMAN YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Ch 1, Chemistry	2	Ch 2, Chemistry	3
Ch 3, Lab. Chemistry † 2	1	Ch 4, Lab. Chemistry † 2	1
Eh 1a, Public Speaking	1	Eh 1b, Public Speaking	1
Eh 3, English Composition	3	Eh 4, English Composition	3
Md 1, Drawing * 6	2	Md 2, Drawing * 6	2
†† Modern Language	3	†† Modern Language	2
Ms 2, Algebra	5	Ms 4, Trigonometry } Ms 6a, Analytic Geometry }	5
Mt 1, Military Drill † 5	2½	Mt 1, Military Drill † 5	2½
	19½		19½

†† A student beginning a new language must take a five hour course, which will complete the modern language requirement. In case this is done, Eh 3, English Composition, will be taken in the sophomore year.

SOPHOMORE YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Ce 1a, Surveying.. } Ce 2a, Field Work }	2 ⅔	Ce 2b, Plotting.... } Ce 2c, Field Work }	1 ⅔
Eh 2a, English Composition...	1	Ce 3a, Railroad Curves..... } Ce 4a, Railroad Field Work }	3
Ms 6b, Analytical Geometry } Ms 7, Calculus..... }	5	Eh 2b, English Composition...	1
†† Modern Language ...	3	Ms 8, Calculus.....	5
Md 3, Drawing *6.....	2	†† Modern Language ...	2
Ps 1, Physics.....	5	Md 4, Drawing *6.....	2
Pt Physical Training *2.....	⅔	Ps 2, Physics.....	3
		Ps 5, Lab. Physics †4.....	2
	19 ⅓	Pt Physical Training *2.....	⅓
			20 ⅓

JUNIOR YEAR

Ce 3b, Earthwork.....	1	Ce 6, Drawing *6.....	2
Ce 4b, Railroad Field Work } Ce 4c, Railroad Office Work }	2	Ce 9a, Advanced Surveying...	1
Ce 5, Highway Engineering...	2	Ce 8, Sanitary Engineering or Ce 19, Railroad Engineering }	2
Ec 1b, Political Economy.....	2	Ce 10, Hydraulics.....	3
Ms 10, Practical Astronomy...	2	Ce 21, Structures.....	2
Md 5, Mechanics.....	5	Ec 1b, Political Economy.....	2
Ps 9, Lab. Physics †4.....	2	Md 6, Mechanics.....	5
Ps 19, Least Squares.....	1	Pt Physical Training *2.....	⅔
Pt Physical Training *2.....	⅔		
	17 ⅔		17 ⅔
		Ce 9b, Advanced Surveying...	2

†† A student beginning a new language must take a five hour course, which will complete the modern language requirement. In case this is done, Eh 3, English Composition, will be taken in the sophomore year.

SENIOR YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Ce 11, Hydraulic Field Work †4	2	Ce 13a, Structures	3
Ce 12, Structures	3	Ce 13b, Graphic Statics	2
Ce 20, Masonry Construction	2	Ce 15, Designing †6	3
Ce 14, Designing †12	6	Ce 17, Hydraulic Engineering and Ee 12b, Electrical Transmission	4
Ce 16, Hydraulic Engineering or Ce 24a, Railroad Engineering	2	or Ce 24b, and 25, Railroad Engineering	4
Hy 5, European History	2	Ce 26, Cement Testing and Me 25, Testing	†4 2
		Ec 6, Business Law and Contracts	3
	17		17

At graduation the student receives the degree of Bachelor of Science. Upon the completion of one year's prescribed work in residence, or two years' work in absence, including the presentation of a satisfactory thesis. and examination at the University, he receives the degree of Master of Science. Three years after graduation, upon the presentation of a satisfactory thesis and proofs of professional work, he may receive the degree of Civil Engineer.

The Mechanical Engineering Course

The prescribed studies in this course are intended to give the student a fundamental engineering training. Care has been taken so to arrange the sequence of subjects that the instruction given may have the greatest efficiency. Each course should be completed in its prescribed order. Variation from the stated order may only be made in important cases.

The first two years are preparatory for the professional work. In this time the prescribed courses in mathematics and language are completed. The student who would be successful in his professional studies should master thoroughly the required mathematics. A good reading knowledge of German or French should be acquired in this time, as many of the more important engineering papers first appear in those languages.

Time limitation prevents much specializing in the professional subjects of the last two years, other than by choosing among the various main branches of Civil, Electrical, or Mechanical engineering. Arrangements have been made, however, to allow a student of mechanical engineering

to cover more ground in electrical engineering if his standing admits of the extra work.

The professional subjects should train a student to think for himself and have self-reliance in undertaking new work, as well as give him professional information. The general subjects prescribed are considered of especial importance to a student of applied science.

The tabulated list shows the prescribed subjects and the time given to each. More detailed information may be had from the brief descriptions of each subject, found under "Courses of Instruction."

Requirements for Graduation

Freshman Year

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Ch 1, Chemistry	2	Ch 2, Chemistry	3
Ch 3, Chemical Laboratory *2.	1	Ch 4, Chemical Laboratory *2.	1
Eh 1, Public Speaking	1	Eh 1, Public Speaking	1
Eh 3, English Composition	3	Eh 4, English Composition	3
†† Modern Language	3	†† Modern Language	2
Md 1, Drawing *6	2	Md 2, Drawing *6	2
Ms 2, Algebra	5	Ms 4, Trigonometry	3
Mt 1, Military †5	2½	Ms 6a, Analytical Geometry	2
	19½	Mt 1, Military †5	2½
			19½

Sophomore Year

Eh 2, Themes	1	Eh 2, Themes	1
Md 3, Descriptive Geometry Ms 6b, Analytical Geometry	*6 2	Md 4, Descriptive Geometry *6	2
Ms 7, Calculus	5	Ps 2, General Physics	3
Ps 1, General Physics	5	Ps 5, Physics Laboratory †4	2
†† Modern Language	3	Ms 8, Calculus	5
Me 1, Woodwork *6	2	†† Modern Language	2
Physical Training *2	⅔	Me 2, Forge Work *4	1⅓
	18⅔	Me 4, Kinematics	3
		Physical Training *2	⅔
			20

†† A student beginning a new language must take a five hour course, which will complete the modern language requirement. In case this is done, Eh 3, English Composition, will be taken in the sophomore year.

JUNIOR YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Me 3, Mechanism of Machines.	1	Md 6, Mechanics.....	5
Me 5, Machine Tool Work *6.	2	Me 5, Machine Tool Work *9.	3
Me 9, Materials of Engineering	2	Me 8, Machine Design.....	3
Me 24, Drawing *3½.....	1⅙	Me 10, El. Steam Engineering.	2
Md 5, Mechanics.....	5	Me 15, Mechanical Lab. †2....	1
Ec 1, Political Economy.....	2	Ec 1, Political Economy.....	2
Ps 9, Mechanics & Heat *4...	2	Me 20, Heating & Ventilation.	1
Elective	2	Physical Training *2...	⅔
Physical Training *2...	⅔	Me 19, Machine Drawing *4..	1⅓
	17⅚		19

SENIOR YEAR

Ee 10a, Electrical Engineering.	3	Me 7, Valve Gears.....	2
Ee 11a, Electrical Lab'y *4...	2	Me 15, Mechanical Lab'y †4..	2
Me 11, Thermodynamics.....	3	Me 16, Adv. Steam Engineering	2
Me 12, Steam Boiler Design *6	2	Me 17, Steam Eng. Design †6	3
Me 15, Mechanical Lab'y *2..	1	Me 13, Hydraulic Machinery..	2
Me 18, Advanced Design.....	2	Ec 9, Contracts and Spec.....	3
Ce 1, Plane Surveying.....	2	Elective	3
Ce 2, Field Work Surveying..	½		17
Ce 22, Foundations.....	1		
Ce 23, Hydraulics.....	2		
	18½		

Elective subjects are limited to those considered best adapted to a student of applied science.

Students doing sufficiently well with the regular work as scheduled above will be allowed to elect from the following technical subjects: Ce 23, Hydraulics; Ce 22, Foundations; Me 13, Hydraulic Machinery; Me 14, 19, 23, Marine Engineering; Me 20, Heating and Ventilation; Me 21, Seminary and Ee 10b.

At graduation the student receives the degree of Bachelor of Science. Upon the completion of one year's prescribed work in residence, or two years' in absence, including the presentation of a satisfactory thesis and examination at the University, he receives the degree of Master of Science. Three years after graduation, upon the presentation of a satisfactory thesis and proofs of professional work, he may receive the degree of Mechanical Engineer.

The Electrical Engineering Course

This course is intended to provide a thorough preparation in the scientific principles involved in the practice of electrical engineering; to explain and illustrate the application of these principles to the design, construction, installation, and running of apparatus with which the electrical engineer has to deal, and to give practice and experience in the care and running of the same. In addition to this purely electrical work the student takes up carpentry, forge work, machine work, mechanical drawing, mathematics, physics, mechanics, steam engineering, and other subjects allied to engineering work. The general courses, required or elective, include English language, logic, psychology, history, political economy, education, sociology, and constitutional law.

The equipment for laboratory work in electrical engineering is ample and includes the standard forms of instruments and machines.

Requirements for Graduation

FRESHMAN YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Ch 1, Chemistry	2	Ch 2, Chemistry	3
Ch 3, Lab. Chemistry † 2	1	Ch 4, Lab. Chemistry † 2	1
Eh 1, Public Speaking	1	Eh 1, Public Speaking	1
Eh 3, English Composition	3	Eh 4, English Composition	3
Md 1, Drawing, * 6	2	Md 2, Drawing * 6	2
* Modern Language	3	* Modern Language	2
Ms 2, Algebra	5	Ms 4, Trigonometry	3
Mt 1, Military † 5	2½	Ms 6a, Analytic Geom	2
		Mt 1, Military † 5	2½
	19½		19½

SOPHOMORE YEAR

Eh 2, Themes	1	Eh 2, Themes	1
Md 3, Descriptive Geom.	* 6 2	Md 4, Descriptive Geom. * 6	2
Md 9, Drawing		Me 2, Forge Work * 4	1⅓
Me 1, Wood Work † 4	1⅓	Me 4, Kinematics	3
Modern Language	3	Modern Language	2
Ms 6b, Analytic Geometry	3	Ms 8, Calculus	5
Ms 7, Calculus	2	Ps 2, Physics	3
Ps 1, Physics	5	Ps 5, Lab. Physics † 4	2
Physical Training * 2	⅔	Physical Training * 2	⅔
	18		20

JUNIOR YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Ee 1a, Elements of Electrical Engineering	2	Ee 1b, Elements of Electrical Engineering	3
Md 5, Mechanics	5	Ee 2b, Lab. Work † 2	1
Me 5, Machine Work * 4	1⅓	Md 6, Mechanics	5
Ps 11, Electrical Meas. † 6	3	Me 5, Machine Work * 4	1⅓
Ec 1, Political Economy	2	Ec 1, Political Economy	2
Hy 5, History or Ec 7 European Government	2	Me 10, Fuels	2
Physical Training * 2	⅔	Me 8, Machine Design	3
Elective	2⅔	Physical Training * 2	⅔
	18⅔		18

SENIOR YEAR

Ee 3a, Elements of Alternating Currents	3	Ee 3b, Alternating Current Machinery	2
Ee 4a, Electrical Development	2	Ee 7b, Electrical Engineering	2
Ee 5a, Design of Electrical Machinery † 4	2	Ee 5b, Design of D. C. and A. C. Machinery	1½
Ee 6a, Laboratory Work † 4	2	Ee 6b, Laboratory Work † 4	2
Me 11, Steam Engineering	3	Ee 8b, Electrical Engineering Practice * 4	1⅓
Me 26, Mechanical Lab'y † 3	1½	Ec 6, Business Law	3
Ce 1 and 2, Plain Surveying and Field Work	2½	Me 19, Machine Drawing * 4	1⅓
Ce 23, Hydraulics	2	Elective	4⅓
			17⅓

At graduation the student receives the degree of Bachelor of Science. Upon the completion of one year's prescribed graduate work in residence, or two years' in absence, including the presentation of a satisfactory thesis and examination at the University, he receives the degree of Master of Science. Three years after graduation, upon the presentation of a satisfactory thesis and proofs of professional work, he may receive the degree of Electrical Engineer.

COLLEGE OF PHARMACY

FACULTY OF INSTRUCTION

GEORGE EMORY FELLOWS, PH. D., L. H. D., LL. D.
President of the University

JAMES NORRIS HART, C. E., M. S.
Professor of Mathematics and Astronomy and Dean of the University

ALFRED BELLAMY AUBERT, M. S. — *Professor of Chemistry*

LUCIUS HERBERT MERRILL, B. S.
Professor of Biological and Agricultural Chemistry

FREMONT LINCOLN RUSSELL, B. S., V. S. — *Professor of Biology*

HORACE MELVYN ESTABROOKE, M. A. — *Professor of English*

JAMES STACY STEVENS, M. S., LL. D. — *Professor of Physics*

GILMAN ARTHUR DREW, PH. D. .. — *Professor of Biology*

WILBUR FISK JACKMAN, B. S., PH. C. — *Professor of Pharmacy*

RALPH KNEELAND JONES, B. S. — *Librarian*

JACOB BERNARD SEGALL, PH. D.
Professor of Romance Languages

WALTER STEVENS BROWN
Professor of Military Science and Tactics

MINTIN ASBURY CHRYSLER, PH. D.
Associate Professor of Botany

GEORGE RUFUS WHEELER, M. A. — *Acting Professor of English*

ANDREW PAUL RAGGIO, PH. D.
Assistant Professor of Romance Languages

HARLEY RICHARD WILLARD, M. A.
Assistant Professor of Mathematics

WALTER EVERETT PRINCE, M. A. — *Instructor in English*

PERCY LORING REYNOLDS, M. D.
Physical Director and University Physician

ELMER EARL MOOTS, B. C. E. — *Instructor in Mathematics*

WINDSOR PRATT DAGGETT, PH. B.
Instructor in Public Speaking

HENRY WALTER BEARCE, B. S. — *Instructor in Physics*

DAYTON JAMES EDWARDS, B. S. — *Instructor in Biology*

ROBERT EDMUND CLAYTON, B. S. — *Instructor in Chemistry*

GLADYS ETHEL FELLOWS, B. A.
Instructor in Romance Languages
JAMES SEYMOUR, Ph. C., B. S. *Instructor in Chemistry*
HENRY LEWIS SWEET, B. A. *Instructor in Mathematics*
WILLIS FLYE WASHBURN, B. S. *Instructor in Chemistry*
CHARLES SYLVESTER RIDGWAY, B. S. *Instructor in Botany*
LOWELL JACOB REED, B. S. *Instructor in Mathematics and Physics*
GEORGE EDWARD PEARSON, M. A. *Instructor in English*
CARLETON CHASE MURDOCK, B. A. *Tutor in Physics*

GENERAL INFORMATION

The College of Pharmacy comprises:
The Pharmacy Course
The Short Course in Pharmacy

The Pharmacy Course

This course is offered in response to a demand for a thorough training, both general and technical, for those who are to become pharmacists. It aims to combine a broad general culture and a thorough preparation along its special lines, with the design of affording both the intellectual development necessary for the well rounded professional or business man, and the necessary technical training. To this end, it includes the same instruction in modern languages, civics, and the sciences, as is offered in other college courses. Thirty credits are required for graduation.

Those who intend to fit themselves for pharmaceutical work are urged to consider carefully the superior advantages of this course. The growing importance of the biological, sanitary, and medical sciences, and the pharmacist's relation to them, make it increasingly necessary to his success that he be not only a well trained man in the technical branches but an educated man in the broadest sense.

Instruction in pharmaceutical studies is given by means of lectures, recitations, and tests, supplemented by work in the laboratories of chemistry and pharmacy. It embraces qualitative, quantitative, and volumetric analysis, toxicology, bacteriology, prescriptions, the preparation of pharmaceutical compounds, and original investigations.

The library contains valuable reference literature in chemistry and pharmacy, and the best chemical and pharmaceutical journals.

Requirements for Graduation

Freshman Year

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Rm 3a, French *	3	Rm 3b, French	2
Eh 1, Pub. Speaking	1	Eh 1, Pub. Speaking	1
Eh 3, Eng. Composition	3	Eh 4, Eng. Composition	3
Ch 1, Gen. Chemistry	2	Ch 2 General Chemistry	3
Ch 3, Lab. Chem. †2	1	Ch 4, Lab. Chem. †2	1
Ms 2, Algebra	5	Ms 1, Solid Geom. } Ms 4, Trig. (10 w.) }	5
Military †5	2½	Military †5	2½
	17½		17½

Sophomore Year

Rm 4a, French	3	Rm 4b, French	3
Ps 12, Gen. Physics	5	Ps 5, Lab. Physics †4	2
Eh 2, Eng. Composition	1	Eh 2, Eng. Composition	1
Ch 5, Inorg. Chemistry	2	Ch 6, Inorg. Chemistry	3
Ch 14, Qual. Anal. †8	4	Ch 15, Qual. Anal. †8	4
Bl 1, Gen. Biol.	2	Bl 21, Gen. Botany	2
Bl 2, Lab. Biol. †2	1	Bl 22, Lab. Botany †4	2
Bl 9, Physiology	2	Elective	1
	20		18

Junior Year

Ch 7, Org. Chemistry	3	Ch 8, Org. Chemistry	2
Ch 16, Quant. Anal. †8	4	Ch 19, Vol. Anal. †12	6
Ch 30, Biol. Chem.	5	Ch 21, Tox. etc. †2	1
Bl 25, Plant Hist.	2	Ch 31, Chem. Eq.	2
Bl 26, Lab. Plant Hist. †4	2	Bl 17, Bacteriol. †6	3
Pm 5, Inorg. Pharmacog.	2	Pm 6, Org. Pharmacog.	4
Elective	2	Elective	2
	20		20

* Students beginning German must take five hours per week for a year, which will complete the required work in modern language.

SENIOR YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Pm 2, Pharmacy	5	Pm 4, Pharmacopeia	5
Pm 3, Lab. Pharm. † 12	6	Pm 9, Pharm. Reading † 5	2½
Pm 7, Mater. Med	3	Pm 10, Lab. Pharm. † 10	5
Elective	4	Pm 11, Prescriptions	3
		Elective	4
	18		19½

From courses in History, Philosophy, and Civics a total of at least five hours must be chosen.

The number of hours required and elected need not exceed 150, or 30 credits.

At graduation the student receives the degree of Bachelor of Science. Upon the completion of one year's prescribed work in residence, or two years' in absence, including the presentation of a satisfactory thesis, and examination at the University, he receives the degree of Master of Science.

The Short Course in Pharmacy

This course, of two years, is designed for those who, for lack of time or for other reasons, are unable to take the course of four years. The more general educational studies of the full course are omitted, but as broad a range of subjects is offered as can be undertaken without sacrifice of thoroughness in the technical work. The course corresponds, in general, to the usual full course of pharmacy colleges. The work required of the student will occupy his whole time during the college year of nine months, and will usually exclude work in drug stores during term time. The brevity of this course does not warrant extending to other than advanced students the privilege of electives.

Requirements for Graduation

FRESHMAN YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Ch 1, Gen. Chemistry	2	Ch 2, Gen. Chemistry	3
Ch 14, Qual. Anal. † 16	8	Ch 15, Qual. Anal. (9 w.)	
Pm 1, Pharm. Chem	5	Ch 19, Vol. Anal. (9 w.) † 10	5
Pm 5, Inorg. Pharmacog	2	Ch 31, Chem. Eq	2
	17	Bl 33, El. Botany	1
		Bl 34, Lab. Botany † 4	2
		Pm 6, Org. Pharmacog	4
			17

SOPHOMORE YEAR

Ch 7, Org. Chem	3	Ch 8, Org. Chem	2
Pm 2, Pharmacy	5	Ch 21, Tox., etc., † 2	1
Pm 3, Lab. Pharmacy † 12	6	Pm 4, Pharmacy	5
Pm 7, Mat. Medica	3	Pm 9, Pharm. Read. † 3	1½
Bl 35, Pharm. Hist	1	Pm 10, Lab. Pharm. † 10	5
Bl 36, Lab. Pharm. Hist. † 4	2	Pm 11, Prescriptions	3
	20	Bl 17, Bacteriol. † 6	3
			20½

Students who complete this course in a satisfactory manner receive the degree of Pharmaceutical Chemist.

COLLEGE OF LAW

FACULTY OF INSTRUCTION

GEORGE EMORY FELLOWS, PH. D., L. H. D., LL. D.
President of the University
WILLIAM EMANUEL WALZ, M. A., LL. B.
Dean, and Professor of Law
* ALLEN ELLINGTON ROGERS, M. A.
Professor of Constitutional Law
EDGAR MYRICK SIMPSON, B. A.
Assistant Professor of Real Property and Corporations
BERTRAM LEIGH FLETCHER, LL. B.
Instructor in Negotiable Paper
GEORGE HENRY WORSTER, LL. M. *Instructor in Sales and Wills*
BARTLETT BROOKS, B. A., LL. B. *Instructor in Contracts*
FOREST JOHN MARTIN, LL. B.
Resident Lecturer on Common Law Pleading and Maine Practice
HUGO CLARK, C. E.
Resident Lecturer on Equity Pleading and Practice
CHARLES HAMLIN, M. A.
Lecturer on Bankruptcy and Federal Procedure
LUCILIUS ALONSO EMERY, M. A., LL. D.
Lecturer on Roman Law and Probate Law
LOUIS CARVER SOUTHARD, LL. D
Lecturer on Medico-Legal Relations
RALPH KNEELAND JONES, B. S. *Librarian*

GENERAL INFORMATION

The College of Law was opened to students in 1898. It will occupy by the beginning of 1908 the entire sixth story of the Exchange building, at the corner of State and Exchange streets, Bangor. In this city are held annually one term of the U. S. District Court, five terms of the Maine Supreme Judicial Court, one term of the Law Court, and daily

* Absent on leave.

sessions of the Municipal Court. The law library contains about 3,000 volumes, including the reports of the Supreme Court of the United States, Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Ohio, and the Court of Appeals of New York, the New York Common Law and Chancery Reports, the American Decisions, American Reports, American State Reports, the Complete Reporter System, the Lawyers' Reports Annotated, all the Law Encyclopædias, and a considerable number of text-books.

Admission

Graduates of any college or satisfactory preparatory school are admitted to the college as candidates for the degree of Bachelor of Laws without examination. Other applicants must give satisfactory evidence of the necessary educational qualifications for the pursuit of the required course of study. These will be fixed in each case according to the rules of the Association of American Law Schools, of which association this school is a member. Attention is called to a change made in these rules by the Association of American Law Schools at its meeting at Narragansett Pier, R. I., in August, 1905. The following resolution was then passed:

"Section one of Article VI of the Articles of Association shall be amended so that it will read as follows:

"I. It shall require of all candidates for its degree at the time of their admission to the school the completion of a four years' high school course, or such a course of preparation as would be accepted for admission to the state university, or to the principal colleges and universities in the state where the law school is located; provided, that this requirement shall not take effect until September, 1907."

Special students, not candidates for a degree, will be admitted without examination, and may pursue any studies for which they are prepared.

Students from other schools which are members of the Association of American Law Schools, are admitted to classes in this institution corresponding to classes in the schools from which they come, upon the production of a certificate showing the satisfactory completion of the prior work in such schools.

Students from law offices otherwise qualified are admitted to advanced standing upon passing a satisfactory examination upon the earlier subjects of the course.

Members of the bar of any state may be admitted to the senior class, without examination, as candidates for the degree of Bachelor of Laws, while graduate students may take one of the two courses leading to the degree of Master of Laws.

Methods of Instruction

The college is not committed exclusively to any one method of instruction, and recognizes the great value of lectures by able men and the profit to be found in the use of standard text-books; but the greatest stress is placed upon the study of selected cases, and most of the work is carried on in this way. It is believed that through the case the student can best come at the controlling principles of the law, and that in no other way can he get so vital a comprehension of them. "Through the case to the principle," may, perhaps, adequately indicate the standpoint of the school in the matter of method.

Particular stress is placed upon the Practice Court, which is held once a week as a part of the work of the college, and in which every student is required to appear regularly. The questions of law are in all instances made to arise from the pleadings prepared by the students, and briefs summarizing the points involved and the authorities cited, are submitted to the presiding judge.

The aim and spirit of the college are eminently practical, the purpose being to equip men for the everyday duties of the practicing attorney.

Course of Study

The course of study covers three years, in accordance with the requirements for admission to the bar in the State of Maine. The college year consists of thirty-two weeks, and is divided into the fall, winter, and spring terms, of eleven, ten, and eleven weeks respectively.

Expenses

The annual tuition fee is $70, $23.33 at the beginning of each term, payable in advance. Of this sum $10 is a library charge. The graduation fee is $10. There are no other charges.

Board and furnished rooms, with light and heat, may be obtained in the most convenient locations, at a price ranging from $3 to $7 a week. It is believed that expenses in this department, as well as in other departments of the University, are lower than in any other New England college.

Degrees

At the completion of the three years' course the degree of Bachelor of Laws is conferred. Upon the completion of one year's prescribed work in residence, or two years' in absence, including the presentation of a satisfactory thesis and examination at the University, the degree of Master of Laws is granted.

Attorneys-at-law who have been actively engaged in practice at the bar for not less than five years, and attorneys who hold a college degree and have practised for not less than two years, may, on presentation of a recommendation from one of the justices of the highest court of their state, be also admitted to the course leading to the master's degree.

COURSES OF INSTRUCTION

Law 1. Agency.—Text-book, Huffcut's Cases on Agency. *Three hours a week.* Spring term. Mr. Worster.

Law 2. Bankruptcy.—Lectures. *Two hours a week.* Winter term. General Hamlin.

Law 3. Carriers.—Text-book, McClain's Cases on Carriers. *One hour a week.* Fall term. Professor Simpson.

Law 4. Carriers.—A continuation of course 3. *Three hours a week.* Winter term. Professor Simpson.

Law 5. Common Law Pleading.—Lectures. *Two hours a week.* Winter term. Mr. Martin.

Law 6. Common Law Pleading.—A continuation of course 5. *One hour a week.* Spring term. Mr. Martin.

Law 7. Conflict of Laws.—Dwyer's Cases. *Three hours a week.* Spring term. Professor Simpson.

Law 8. Constitutional Law.—Boyd's Cases. *Two hours a week.* Spring term. Mr. Worster.

Law 9. Contracts.—Keener's Cases on Contracts. *Four hours a week.* Fall term. Mr. Brooks.

Law 10. Contracts. A continuation of course 9. *Three hours a week.* Winter term. Mr. Brooks.

Law 11. Contracts.—A continuation of course 10. *Two hours a week.* Spring term. Mr. Brooks.

Law 12. Criminal Law.—Beale's Cases on Criminal Law. *Two hours a week.* Winter term. Professor Simpson.

Law 13. Criminal Law.—A continuation of course 12. *Three hours a week.* Spring term. Professor Simpson.

Law 14. Damages.—Beale's Cases on Damages. *Three hours a week.* Winter term. Mr. Worster.

Law 15. Domestic Relations.—Smith's Cases on Persons. *Three hours a week.* Fall term. Professor Simpson.

Law 16. Equity Jurisprudence.—Bispham on Equity Jurisprudence and Shepard's Cases on Equity. *Four hours a week.* Fall term. Professor Walz.

Law 17. Equity Jurisprudence.—A continuation of course 16. *Three hours a week.* Winter term. Professor Walz.

Law 18. Equity Pleading.—Lectures. *Two hours a week.* Winter term. Mr. Clark.

Law 19. Evidence.—Thayer's Cases. *Four hours a week.* Fall term. Professor Simpson.

Law 20. Evidence.—A continuation of course 19. *Three hours a week.* Winter term. Professor Simpson.

Law 21. Evidence.—Lectures. *Number of hours not fixed.* Winter term. Mr. ————

Law 22. Executors and Administrators.—Lectures. *One hour a week.* Spring term. Professor Simpson.

Law 23. Federal Courts.—Lectures. *One hour a week.* Spring term. Professor Walz.

Law 24. General Review.—Gardner's Review. *One hour a week.* Fall term. Professor Walz.

Law 25. General Review.—Gardner's Review. *One hour a week.* Winter term. Professor Walz.

Law 26. General Review.—Gardner's Review. *One hour a week.* Spring term. Professor Walz.

Law 27. History of Law.—Lectures. *One hour a week.* Fall term. Professor Walz.

Law 28. Insurance.—Woodruff's Cases. *Three hours a week.* Spring term. Mr. Worster.

Law 29. International Law.—Lectures. *One hour a week.* Fall term. Professor Walz.

Law 30. Maine Practice.—Lectures. *One hour a week.* Spring term. Mr. Martin.

Law 31. Medico-Legal Relations.—Lectures. *About six hours.* Spring term. Mr. Southard.

Law 32. Municipal Corporations.—Smith's Cases. *Three hours a week.* Winter term. Professor Walz.

Law 33. Negotiable Paper.—Huffcut's Cases. *Two hours a week.* Winter term. Mr. Fletcher.

Law 34. Negotiable Paper.—A continuation of course 33. *Three hours a week.* Spring term. Mr. Fletcher.

Law 35. Partnership.—Ames's Cases. *Four hours a week.* Spring term. Professor Walz.

Law 36. Private Corporations.—Smith's Cases. *Four hours a week.* Fall term. Professor Simpson.

Law 37. Private Corporations.—A continuation of course 36. *Three hours a week.* Winter term. Professor Simpson.

Law 38. Probate Law and Practice.—Lectures. *About ten hours.* Spring term. Mr. Chief Justice Emery.

Law 39. Real Property.—Tiedeman on Real Property. Four hours *a week.* Fall term. Professor Simpson.

Lw 40. Real Property.—A continuation of course 39. *Three hours a week.* Winter term. Professor Simpson.

Lw 41. Real Property.—Finch's Cases on the Law of Property in Land. *Four hours a week.* Spring term. Professor Simpson.

Lw 42. Roman Law.—Lectures. *About ten hours.* Spring term. Mr. Chief Justice Emery.

Lw 43. Sales.—Burdick's Cases. *Two hours a week.* Fall term. Mr. Worster.

Lw 44. Sales.—A continuation of course 43. *Two hours a week.* Winter term. Mr. Worster.

Lw 45. Suretyship.—Ames's Cases. *Two hours a week.* Fall term. Mr. Worster.

Lw 46. Suretyship.—A continuation of course 45. *Two hours a week.* Winter term. Mr. Worster.

Lw 47. Torts.—Ames and Smith's Cases. *Four hours a week.* Fall term. Professor Walz.

Lw 48. Torts.—A continuation of course 47. *Three hours a week.* Winter term. Professor Walz.

Lw 49. Torts.—A continuation of course 48. *Two hours a week.* Spring term. Professor Walz.

Lw 50. What to do in Court.—Lectures. *About ten hours.* Spring term. Mr. Chief Justice Emery.

Lw 51. Wills.—Chaplin's Cases. *Three hours a week.* Spring term. Mr. Worster.

THE MAINE AGRICULTURAL EXPERIMENT STATION

FACULTY OF INVESTIGATION

GEORGE EMORY FELLOWS, PH. D., L. H. D., LL. D.	*President of the University*
CHARLES DAYTON WOODS, Sc. D.	*Director*
JAMES MONROE BARTLETT, M. S.	*Chemistry*
LUCIUS HERBERT MERRILL, B. S.	*Chemistry*
FREMONT LINCOLN RUSSELL, B. S., V. S.	*Veterinary Science*
GILBERT MOTTIER GOWELL, M. S.	*Poultry Investigations*
WARNER JACKSON MORSE, M. S.	*Vegetable Pathology*
EDITH MARION PATCH, B. S.	*Entomology*
RAYMOND PEARL, PH. D.	*Biology*
FRANK MACY SURFACE, PH. D.	*Blology*
HERMAN HERBERT HANSON, M. S.	*Chemistry*
ARTHUR CRAIG WHITTIER, B. S.	*Chemistry*
JOANNA CARVER COLCORD, B. S.	*Chemistry*
ROYDEN LINDSAY HAMMOND	*Seed Analysis and Photography*
HENRY ATLEIGH MILLETT	*Meteorology*
ANNIE MARIE SNOW	*Clerk and Stenographer to the Director*
BLANCHE FOLSOM POOLER	*Stenographer*
WALTER ANDERSON	*Poultry Investigations*
FRANK DELMONT STERRY	*Laboratory Assistant*

ESTABLISHMENT OF THE STATION

The Maine Fertilizer Control and Agricultural Experiment Station, established by act of the Legislature approved March 3, 1885, began its work in April of that year in quarters furnished by the College. After this Station had existed for two years, Congress passed what is known as the Hatch Act, establishing agricultural experiment stations in every state. This grant was accepted by the Maine Legislature by an Act approved March 16, 1887, which established the Maine Agricultural Experiment Station as a department of the University. The reorganization was effected in June, 1887, but work was not begun until February 16, 1888. In 1906 Congress passed the Adams Act for the further endowment of the stations established under the Hatch Act.

GOVERNMENT OF THE STATION

By authority of the Trustees the affairs of the Station are considered by the Station Council, (see page 6) composed of the President of the University, three members of the Board of Trustees, the Director of the Station, the heads of the various departments of the Station, the Commissioner of Agriculture, and one member each from the State Pomological Society, the State Grange, and the State Dairyman's Association. The recommendations of the Council are referred to the Trustees for final action. The Director is the executive officer of the Station, and the other members of the staff carry out the lines of research that naturally come under their departments.

INCOME

The income of the Station for 1907-8 is about $35,000; $15,000 of which comes from the Hatch fund; $9,000 from the Adams fund; $5,000 from State appropriations for food, drugs, seed and feeding stuff inspections; about $4,000 from fertilizer inspection fees; $1,000 from the United States Department of Agriculture for co-operative experiments with poultry; and about $1,000 from miscellaneous sources.

THE OBJECT

The purpose of the experiment stations is defined in the Act of Congress establishing them as follows:

"It shall be the object and duty of said experiment stations to conduct original researches or verify experiments on the physiology of plants and animals; the diseases to which they are severally subject, with the remedies for the same; the chemical composition of useful plants at their different stages of growth; the comparative advantages of rotative cropping as pursued under a varying series of crops; the capacity of new plants or trees for acclimation; the analysis of soils and water; the chemical composition of manures, natural and artificial, with experiments designed to test their comparative effects on crops of different kinds; the adaptation and value of grasses and forage plants; the composition and digestibility of the different kinds of food for domestic animals; the scientific and economic questions involved in the production of butter and cheese; and such other researches or experiments bearing directly on the agricultural industry of the United States as may in each case be deemed advisable, having due regard to the varying conditions and needs of the respective states or territories."

The work that the Experiment Station can undertake from the Adams Act fund is more restricted and can "be applied only to paying the necessary expenses of conducting original researches or experiments bearing directly on the agricultural industry of the United States, having due regard to the varying conditions and needs of the respective states and territories."

Any resident of Maine concerned in agriculture has the right to apply to the Station for any assistance that comes within its province.

EQUIPMENT

Most of the Station offices and laboratories are in Holmes Hall, described on page 21. The Station is well equipped in laboratories and apparatus, particularly in the lines of chemical, entomological, horticultural, pomological, vegetable pathological, and poultry investigations. Its poultry plant is probably the most complete of that of any experiment station in the country. It has extensive collections illustrating the botany and entomology of the State. It has a library of about 3,000 volumes, chiefly agricultural and biological journals, and publications of the various experiment stations.

INVESTIGATIONS

The Station continues to restrict its work to a few important lines, believing that it is better for the agriculture of the State to study thoroughly a few problems than to spread over the whole field of agricultural science. It has continued to improve its facilities and segregate its work in such a way as to make it an effective agency for research in agriculture. Prominent among the lines of investigation are studies upon the food of man and animals, the diseases of plants and animals, breeding of plants and animals, orchard and field experiments, poultry investigations, and entomological research. Some of these are in co-operation with bureaus of the United States Department of Agriculture. Field experiments with crops and orchards are carried on, in the parts of the State where the crop in question is a leading industry, on private land in co-operation with the owners.

INSPECTIONS

The inspection of food and drugs, the inspection of fertilizers, the inspection of concentrated commercial feeding stuffs, the inspection of agricultural seeds, and the testing of the graduated glassware used in creameries, are entrusted to the Station through its director, who is responsible for the execution of the public laws relating to these matters.

The cost of the fertilizer inspection is borne by a brand tax, that of the feeding stuff, food and drugs, and seed inspections by a State appropriation, and that of chemical glassware by a charge for calibration.

DISSEMINATION OF INFORMATION

The Station publishes the account of its work in bulletin form. The bulletins for a year form a volume of about 250 pages and make up the annual report. Bulletins which contain matter of immediate value to practical agriculture are sent free of cost to the entire mailing list of the Station. On request, the name of any resident of Maine will be placed on the mailing list.

Newspaper bulletins on special topics are published from time to time as occasion demands. These are very generally printed by the press of the State and the agricultural papers of the country.

COMMENCEMENT

The Commencement exercises of 1907 were as follows:

Sunday, June 9: Baccalaureate Address, by Professor Alfred W. Anthony, of Bates College.

Monday, June 10: University Convocation, including reports of departments and student enterprises, and the awarding of prizes; Class Day exercises; President's Reception.

Tuesday, June 11: Receptions by the various fraternities; Alumni Luncheon; Alumnæ Luncheon; Phi Kappa Phi Initiation; Phi Kappa Phi address, by Professor John Graham Brooks of Harvard University.

Wednesday, June 12: Commencement Exercises; Commencement Dinner; Business Meeting of the Alumni Association; Commencement Ball.

DEGREES CONFERRED

College of Agriculture

Alton Arthur Austin, B. S. in Agriculture.....Ridlonville
Sidney Morse Bird, 2nd, B. S. in Agriculture.....Rockland
Caleb Edgar Slocum Burns, B. S. in Agriculture.....Fort Fairfield
Fred Stoddard Neville Erskine, B. S. in Agriculture..East Boston, Mass.
Herbert Henry Green, B. S. in Agriculture.....Spencer, Mass.
William Freeman Schoppe, B. S. in Agriculture.....West Auburn
Richard Foster Talbot, B. S. in Agriculture.....Andover

College of Arts and Sciences

Edith Nora Aiken, B. A. (Latin).....Brewer
William Wesley Bannister Alexander, B. S. (Chemistry)..Everett. Mass.
Marion Balentine, B. A. (Mathematics).....Orono
John Holmes Burleigh, B. S. (English).....South Berwick
Harold Milton Ellis, B. A. (English).....Hingham, Mass.
James Patrick Vincent Fagan, B. S. (Chemistry).....Old Town
Carlotte Nathaniel Garland, B. A. (Philosophy).....Bar Harbor
Joe Kinsman Goodrich, B. S. (Economics).....Skowhegan
George Parlin Goodwin, B. S. (Economics).....Skowhegan
William Dickson Hall, B. S. (Germanic Languages).....Rockland
Guy Edwin Hayward, B. A. (Germanic Languages).....Winthrop

Alden E. Hodgkins, B. S. (Mathematics).....Damariscotta Mills
Mildred Charlotte Mansfield, B. A. (Latin).....Orono
Robie Lawton Mitchell, B. A. (Economics).....West Newfield
Warren Morse, B. A. (Philosophy) [S. T. B., Yale, 1899].....Brewer
Deane Whittier Rollins, B. A. (Economics).....Farmington Falls
Edith Mabel Tate, B. S. (English).....East Corinth
Arnold Washington Totman, B. S. (Economics).....Fairfield

College of Pharmacy

Rex Carlton Gellerson, B. S.....Fort Fairfield
Arthur Nathaniel Beal, Ph. C.....Lisbon Falls
Carroll Curtis Butterfield, Ph. C.....Dover
Thomas Miles Findlen, Ph. C.....Caribou
Harry Colburn Riddle, Ph. C.....Monson
William Houston Saunders, Ph. C.....Deer Isle
Frank Manly White, Ph. C.....Vinalhaven

College of Technology

Francis Osgood Alton, B. S. in Electrical Engineering.....Lynn, Mass.
Arad Thompson Barrows, B. S. in Civil Engineering.....Burleigh
Lucius Dwelley Barrows, B. S. in Civil Engineering.....Foxcroft
John Thaxter Bates, B. S. in Mechanical Engineering.....Calais
Ernest Daniel Bean, B. S. in Civil Engineering.....Haverhill, Mass.
Perry Ashley Bean, B. S. in Civil Engineering.....Albany
Walter Wright Black, B. S. in Mechanical Engineering....Beverly, Mass.
Benjamin Erwin Brann, B. S. in Civil Engineering.....Waterville
Elwin Dresser Brawn, B. S. in Mechanical Engineering.....Dexter
Amon Benjamin Brown, B. S. in Civil Engineering.....Camden
Arno Burr Cayting, B. S. in Forestry.....Brewer
Francis Marsh Albee Claflin, B. S. in Chemistry.....Upton, Mass.
Robert Edmund Clayton, B. S. in Chemistry.....Bangor
Roy Selwin Coffin, B. S. in Forestry.....Bangor
Bennett Robert Connell, B. S. in Electrical Engineering.....Houlton
Elmer Wallace Cummings, B. S. in Civil Engineering.....Paris
Charles Eugene Davis, B. S. in Civil Engineering.....Bridgton
Rosmar Styer Devereux, B. S. in Civil Engineering.....Castine
Edward James Druery, B. S. in Chemistry.....Augusta
Joseph Galland, B. S. in Civil Engineering.....Biddeford
Roy Gilbert Hamlin, B. S. in Electrical Engineering.....Gorham, N. H.
Edward Thomas Harlow, B. S. in Civil Engineering.....South Brewer
John Perham Harvell, B. S. in Mechanical Engineering..Roxbury, Mass.

Lincoln Hall Hodgkins, B. S. in Civil Engineering.....Bunker Hill
Franklin Pratt Holbrook, B. S. in Civil Engineering.....Brooks
Elmer Guy Hooper, B. S. in Civil Engineering.....West Lynn, Mass.
Fred Pote Hosmer, B. S. in Chemistry.....Rockland
Erwin Howard Hussey, B. S. in Civil Engineering.....Guilford
Wilbury Owen Hutchins, B. S. in Civil Engineering.....Orland
Ernest LaRoy Judkins, B. S. in Electrical Engineering.....Skowhegan
Horton Wilmot Keirstead, B. S. in Civil Engineering.....Oakland
Herbert Austin Knowlton, B. S. in Electrical Engineering...Pembroke
Emerson Peavy Lambe, B. S. in Electrical Engineering.....Calais
Reginald Robert Lambe, B. S. in Mechanical Engineering.....Calais
Carl Henry Lekberg, B. S. in Mechanical Engineering..Worcester, Mass.
Ernest Lisherness, B. S. in Civil Engineering.....North New Portland
Arthur Russell Lord, B. S. in Civil Engineering.....Ipswich, Mass.
Karl MacDonald, B. S. in Mechanical Engineering.....Belfast
Herman Ellis McKenzie, B. S. in Mechanical Engineering,
West Jonesport
Frank Everett Maddocks, B. S. in Civil Engineering.....Bluehill
Thomas Angelo Malloy, B. S. in Civil Engineering.....Lewiston
Charles Henry Martin, B. S. in Civil Engineering.....Fort Fairfield
Joseph Clarence Matthieu, B. S. in Electrical Engineering...Farmington
Joseph Farrington Merrill, B. S. in Chemistry.....Auburn
Max Gibson Newman, B. S. in Electrical Engineering.....Fryeburg
Herbert Lewis Nickels, B. S. in Civil Engineering.....Cherryfield
Sidney Baxter Orne, B. S. in Mechanical Engineering..Boothbay Harbor
Harry Ellsworth Packard, B. S. in Civil Engineering...East Winthrop
Alcot Johnson Pennell, B. S. in Electrical Engineering,
Melrose Highlands, Mass.
Tedcastle Bigelow Perry, B. S. in Electrical Engineering..Island Falls
Earle Walter Philbrook, B. S. in Civil Engineering.....Milan, N. H.
Stephen Franklin Pierce, B. S. in Civil Engineering.....Windsorville
Heber Penn Purington, B. S. in Civil Engineering.....Jay
Raymond Alton Quint, B. S. in Electrical Engineering...North Berwick
Carroll Arthur Read, B. S. in Electrical Engineering.....Stillwater
Lowell Jacob Reed, B. S. in Electrical Engineering.....Berlin, N. H.
Reginald Ridge, B. S. in Civil Engineering.....Portland
Albert Prentiss Rounds, B. S. in Civil Engineering.....Bridgton
Walter James St. Onge, B. S. in Electrical Engineering.....Dover
Arthur Haskell Sampson, B. S. in Chemistry.....Gorham
Everett Halliday Stetson, B. S. in Civil Engineering.....Auburn
Howard Carlton Stetson, B. S. in Civil Engineering.....Auburn
Albert William Stevens, B. S. in Electrical Engineering.....Belfast

William Elmer Stone, B. S. in Mechanical Engineering...South Brewer
Porter LaForrest Swift, B. S. in Mechanical Engineering.....Norway
Charles Bucknam Tebbets, B. S. in Civil Engineering.....Auburn
Ernest Leroy Toner, B. S. in Forestry.....Auburn
Willis Flye Washburn, B. S. in Chemistry.....China
Benjamin Franklin Williams, B. S. in Civil Engineering..North Islesboro
Elmer Josiah Wilson, B. S. in Electrical Engineering.....Lynn, Mass
Jesse Davis Wilson, B. S. in Civil Engineering,
(B. A., Bowdoin College, 1904) Brunswick
Lester Clyde Witham, B. S. in Civil Engineering.....North Anson
Abel Percival Wyman, B. S. in Civil Engineering.....Skowhegan
Verne Jerome York, B. S. in Electrical Engineering.....Bangor

College of Law

Bernard Archibald, LL. B. (B. A. Bowdoin College, 1904).....Houlton
Harry Edgar Bangs, LL. B.....Freedom
John Buckley, LL. B.....Stafford Springs, Conn.
Jerome Borden Clark, LL. B.....West Gouldsboro
Robert William DeWolfe, LL. B.....Portland
John Joseph Keegan, LL. B.....Lubec
Edward Roy Monroe, LL. B.....Portland
John Franklin Moody, Jr., LL. B. (B. A., Colby College, 1900)...Auburn
Thomas Henry O'Halloran, LL. B.....Marlboro, Mass.
Lawrence Swift Perry, LL. B.....New Bedford, Mass.

ADVANCED DEGREES

Master of Arts

Florence Balentine, B. A., 1905 (Biology).....Orono
Henry Kingman Dow, B. A., 1903 (Germanic Languages)...Mercer, Pa.
Raymond Arthur Fowles, B. A., 1905 (Philosophy)...N. Attleboro, Mass.

Master of Science

Edward Robie Berry, B. S., 1904 (Chemistry).....Malden, Mass.

Master of Laws

LeRoy Rowell Folsom, B. S., 1895.....Norridgewock

Civil Engineer

Percival Ray Mosher, B. S., 1902.....Memphis, Tenn.
Harold Vose Sheahan, B. S., 1903.....Newman, N. Y.

ELECTRICAL ENGINEER

Fred Merrill Davis, B. S., 1901.....Chicago, Ill.
Clifford Henry Leighton, B. S., 1904.....Upper Newton Falls, Mass.

PRIZES AWARDED

The various prizes were awarded last year as follows:

The Kidder Scholarship, to Warren Alfred Carter, Nobleboro.

The Western Alumni Association Scholarship, to Vaughan Russell Chadbourne, Mattawamkeag.

The New York Alumni Association Scholarship, to George Roy Sweetser, Hampden.

The Boston Alumni Association Scholarship, to Perley Fiske Skofield, Houlton.

The Junior Exhibition Prize, to Cecil Sumner French, Kingfield.

The Sophomore Declamation Prize, to George Frank Barron, Norway.

The Franklin Danforth Prize, to Richard Foster Talbot, Andover.

The Walter Balentine Prize, to Perley Fiske Skofield, Houlton.

The Pittsburg Alumni Association Scholarship, to Cecil Sumner French, Kingfield.

The Maine Dairymen's Association Prizes, to Walter Arthur Cook, Milton, Mass., first; Albert Chester Colley, Denmark, second; Frederick Granville Comins, Brooklyn, N. Y., third.

The L. C. Bateman, H. E. Cook, and George Aiken Prizes, to Caleb Edgar Slocum Burns, Fort Fairfield, first; Perley Fiske Skofield, Houlton, second; Sidney Morse Bird, 2nd, Rockland, third.

The Honorable Z. A. Gilbert Prize, to Alfred Searles Cook, Presque Isle, first; George Phillips Fogg, Hull's Cove, second.

The Honorable A. W. Gilman Prize, to Clarence R. Leland, Mechanic Falls, first; Alton Arthur Austin, Ridlonville, second; Albert Chester Colley, Denmark, third.

APPOINTMENTS

Speakers at the Junior Exhibition, June, 1907

Chester A. Brownell, Newport, R. I.; Elizabeth R. Estabrooke, Orono; Raymond Fellows, Bucksport; Cecil S. French, Kingfield; Bell C. Harris, Sherman Mills; Stacy C. Lanpher, Sebec; Perley F. Skofield, Houlton; Earle N. Vickery, Pittsfield.

Speakers at the Sophomore Prize Declamation Contest, December, 1906

George Frank Barron, Norway; Florence Polleys Chase, Baring; Philbur Leroy Craigin, Woodfords; Walter Lee Emerson, Orono; Edmund Bernard Keating, Salem, Mass.; James Grindle Scales, Guilford; Helen Farwell Steward, Skowhegan.

Members of the Phi Kappa Phi

Marion Balentine, Orono; Lucius Dwelley Barrows, Foxcroft; Francis Marsh Albee Claflin, Upton, Mass.; Harold Milton Ellis, Hingham, Mass.; Alden E. Hodgkins, Damariscotta Mills; Elmer Guy Hooper, West Lynn, Mass.; Arthur Russell Lord, Ipswich, Mass.; Mildred Charlotte Mansfield, Orono; Roby Lawton Mitchell, West Newfield; Edward Roy Monroe, Portland; Lawrence Swift Perry, New Bedford, Mass.; Howard Carlton Stetson, Auburn.

Seniors Receiving General Honors

Marion Balentine, Orono; Lucius Dwelley Barrows, Foxcroft; Francis Marsh Albee Claflin, Upton, Mass.; Harold Milton Ellis, Hingham, Mass.; Alden E. Hodgkins, Damariscotta Mills; Elmer Guy Hooper, West Lynn, Mass.; Arthur Russell Lord, Ipswich, Mass.; Mildred Charlotte Mansfield, Orono; Roby Lawton Mitchell, West Newfield; Lowell Jacob Reed, Berlin, N. H.; Howard Carlton Stetson, Auburn.

From the College of Law

Lawrence Swift Perry, New Bedford, Mass.

Honorable Mention in the College of Law

Jerome Borden Clark, West Gouldsboro.
Edward Roy Monroe, Portland.

Certificates in the School Course in Agriculture

Albert Chester Colley, Denmark.
Malcolm Montgomery Soule, South Freeport.

Reported to the Secretary of War for Publication in the Next United States Army Register as the Most Distinguished Students in the Military Department

Fred Stoddard Neville Erskine, East Boston, Mass.
Sidney Morse Bird, 2nd, Rockland.

CATALOG OF STUDENTS

Major subjects are indicated as follows: Ag. Agriculture, Bl. Biology, Ch. Chemistry, Cv. Civics, Ce. Civil Engineering, Ee. Electrical Engineering, Eh. English, Fy. Forestry, Gm. German, Gk. Greek, Hy. History, Lt. Latin, Ms. Mathematics, Me. Mechanical Engineering, Ml. Modern Languages, Pm. Pharmacy, Pl. Philosophy, Ps. Physics, Rm. Romance Languages.

GRADUATE STUDENTS

Alexander, William Wesley Bannister, B. S., Ch. University of Maine, 1907	*Everett, Mass.*	
Brockie, John Meikle, B. A., Pl. University of Maine, 1906	*Orono*	Bennoch St.
Colcord, Joanna Carver, B. S., Ch. University of Maine, 1906	*Searsport*	College St.
Dinsmore, Ernest LeRoy, B. A., Pl. University of Maine, 1905	*Newport*	
Edwards, Dayton James, B.S., Bl. University of Maine, 1906	*Oxford*	Main St.
Ellis, Harold Milton, B. A., Eh. University of Maine, 1907	*Hingham, Mass.*	No. Main St.
Galland, Joseph, B. S., Rm. University of Maine, 1906	*Biddeford*	
Garland, Carlotte Nathaniel, B. A., Pl. University of Maine, 1907	*Bar Harbor*	
Godfrey, Ethel, B. L., Eh. Smith College, 1903	*Bangor*	Bangor
Graham, Hugh F., B. A. Bowdoin College, 1898	*Patten*	
Jones, Gertrude May, B. S., Bl. University of Maine, 1906	*Corinna*	
Moots, Elmer Earl, B. C. E., Ms. Highland Park College, 1906	*Des Moines, Iowa*	Stillwater

Morse, Warren, B. A., Eh. University of Maine, 1907	*Brewer*	Brewer
Parker, Edward Alton, B. S., Ed. University of Maine, 1904	*Skowhegan*	
Pol, Frances May, B. A., Eh. Smith College, 1906	*Bangor*	Bangor
Reed, Lowell Jacob, B. S., Ee. University of Maine, 1907	*Nashua, N. H.*	Main St.
Ropes, Ellen Marian, B. A., Gm. Bryn Mawr College, 1907	*Bangor*	Bangor
Simmons, Fred'k Johnson, B.A., Hy. University of Maine, 1906	*Charleston*	
Smith, Nathan Rideout, B. A., Pl. Bates College, 1905	*Ware, Mass.*	
Stevens, Albert William, B. S., Ee. University of Maine, 1907	*Belfast*	Β Θ Π House
Whittier, Arthur Craig, B. S., Ch. University of Maine, 1905	*Farmington*	Θ Ε House

SENIORS

Bean, Anna Coffin, Ch.	*Waltham, Mass.,*	Mt. Vernon House
Bean, Chester Howe, Ce.	*Bethel*	301 Oak Hall
Beedle, Arthur Lawrence, Ee.	*South Gardiner*	Campus
Blair, Arthur Adolphus, B.D., Tufts College, 1895, Pl.	*Old Town*	Old Town
Boyle, Claude, Ch.	*Dover*	Α Τ Ω House
Brown, Sarah Ellen, Gk.	*Old Town*	Mt. Vernon House
Brownell, Chester Arthur, Ce.	*Newport, R. I.*	Θ Ε House
Chase, Daniel, Ms.	*Baring*	Σ Α Ε House
Cobb, William Alfred, Ce.	*Auburn*	Φ Κ Σ House
Coleman, Everett Clinton, Ch.	*Boston, Mass.*	Ω Λ Υ House
Collins, Bernard Ira, Ce.	*Haverhill, Mass.*	309 Oak Hall
Cummings, Robert Lincoln, Ee.	*Gorham*	Φ Γ Δ House
Dixon, Leon Snell, Me.	*Orono*	College St.
Dow, Owen Oscar, Ec.	*Hiram*	Φ Γ Δ House
Draper, Clifford Lester, Ee.	*Stoneham, Mass.*	Θ Ε House
Durgin, Albert Guy, Ch.	*Orono*	Middle St.
Emery, Francis Philip, Me.	*Eastport*	Σ Α Ε House
Estabrooke, Elizabeth Read, Eh.	*Orono*	Main St.
Farnsworth, Alice Belle, Gm.	*West Sullivan*	Mill St.
Farnsworth, James Pitt, Ee.	*Milbridge*	Θ Ε House

Fellows, Raymond, Ec.	*Bucksport*	Φ Γ Δ House
Fessenden, Thomas Whitmore, Ph. B., Taylor University, Pl.	*Bangor*	259 Union St., Bangor
Fisher, Roy Haynes, Ce.	*Pepperell, Mass.*	1 College St.
Fogler, Ben Baker, Me.	*Skowhegan*	Σ X House
Foster, Robert Mower, Ee.	*Lisbon*	Φ K Σ House
French, Cecil Sumner, Ee.	*Kingfield*	Φ K Σ House
Gannett, James Adrian, Ee.	*Yarmouth*	Φ K Σ House
Hanscom, Arthur Snow, Ce.	*Leeds Junction*	Φ Γ Δ House
Hardison, Grover Merrill, Ce.	*Caribou*	Ω Δ Υ House
Harris, Bell Curry, Gm.	*Sherman Mills*	Old Town
Hill, William Andrew, Ce.	*Winterport*	Φ Γ Δ House
Hilliard, Stanley Tyng, Me.	*Old Town*	Φ Γ Δ House
Hopkins, George Jesse, Me.	*Bath*	B Θ Π House
Irish, Joshua Swett, Ag.	*Gorham*	207 Oak Hall
Jacobs, Joseph, Ee.	*West Boylston, Mass,*	302 Oak Hall
Johnson, Charles Arthur, Ce.	*Berlin Mills, N. H.*	23 Peters St.
Kendrigan, John Thompson, Ce.	*Rockland, Mass.*	K Σ House
Knight, George Raymond, Ee.	*North Waterford*	Θ X House
Lancaster, Howard Augustus, Ce.	*Old Town*	Old Town
Lanpher, Stacy Clifford, Gm.	*Sebec*	Ω Δ Υ House
Libby, Paul, Ce.	*Somersworth, N. H.*	302 Oak Hall
Locke, Samuel Barry, Fy.	*West Paris*	Σ X House
Lord, Leslie Roland, Ee.	*Poquonock, Conn.*	Σ X House
McNamara, William Stephen, Rm.	*Millville, Mass.*	Θ X House
Matheas, Fred Walter, Ce.	*Bangor*	205 Oak Hall
Merrill, Anne Margaret, Rm.	*Auburn*	Bennoch St.
Meserve, Claude Pitman, Me.	*North Bridgton*	Σ Δ E House
Milliken, Earle Linwood, Ee.	*Westbrook*	Δ T Ω House
Miner, Henry LeRoy, Ch.	*Haverhill, Mass*	Δ T Ω House
Morrison, James Joseph, Ee.	*Pembroke*	Park St.
Morton, Fred Constine, Ee.	*South Windham,*	207 Oak Hall
Perkins, Howard Lewis, Ee.	*Augusta*	203 Oak Hall
Potter, Robert Eaton, Ce.	*Bath*	Σ X House
Robinson, Philip Increase, Ee.	*Waterville*	Φ K Σ House
Seamon, Percy Ralph, Ee.	*Roxbury, Mass.*	Θ X House
Skolfield, Perley Fiske, Ag.	*Houlton*	Campus
Smith, Raymond Judson, Fy.	*Skowhegan*	Φ Γ Δ House
Steward, Robert Kent, Ce.	*Skowhegan*	Φ Γ Δ House
Sturtevant, Merle Alton, Ps.	*Hebron*	Σ Δ E House
Sturtevant, Walter Linwood, Ch.	*Bangor*	B Θ Π House
Thomas, Searle Fowler, Ee.	*Lincoln*	Φ K Σ House

Trask, Warren Dudley, Ce.	*Augusta*	K Σ House
Vickery, Earle Nelson, Ee.	*Pittsfield*	Σ X House
Wakefield, Sylvia Serena, Gm.	*Saco*	Mt. Vernon House
Weston, Clarence McLellan, Ce.	*Madison*	Φ K Σ House
Wilbur, Walter Edmund, Ee.	*Pembroke*	Park St.
Wood, Louis Carl, Ce.	*Berlin, N. H.*	Σ X House

JUNIORS

Barber, Clarence Wallace, Ag.	*Woodfords*	Park St.
Bennet, DaCosta FitzMaurice, Ec.	*Lubec*	Θ E House
Black, William Milgate, Ce.	*Belfast*	103 Oak Hall
Bowman, Harold Melville, Me.	*Salmon Falls, N. H.*	311 Oak Hall
Brann, Bertrand French, Ch.	*Bangor*	Bangor
Brown, Wallace Francis, Ce.	*Yarmouth*	Θ X House
Cadwallader, Jesse Morris, Ee.	*Lindenhurst, N. Y.*	Crosby St.
Carlisle, George Thomas, Jr., Fy.	*North Edgecomb,*	Main St.
Carter, Warren Alfred, Ch.	*Nobleboro,*	Φ K Σ House
Chandler, Bernard Albert, Fy.	*New Gloucester,*	Φ K Σ House
Chase, Florence Polleys, Rm.	*Baring*	Mt. Vernon House
Clemons, Samuel Wadsworth, Me.	*Hiram*	A T Ω House
Cleveland, Charles Calvin, Ag.	*Skowhegan*	18 Main St.
Conner, Warren Edward, Ce.	*Auburn*	Φ K Σ House
Corson, Preston Llewellyn, Ee.	*Wilton*	Main St.
Cragin, Philbur Leroy, Ee.	*Woodfords*	Θ X House
Cram, Frederick Sutherland, Ce.	*Brunswick*	Σ A E House
Davis, Cyrus Hersey, Ee.	*Woodfords*	Park St.
Eddy, Harold Frederick, Ee.	*Bangor*	Bangor
Emerson, Walter Lee, Ce.	*Lewiston*	B Θ Π House
Estey, Chester Arthur, Ee.	*Lisbon Falls*	35 Mill St.
Farnham, Harry Lester, Ee.	*Lynn, Mass.*	Θ E House
Farrar, Cecil C., Lt.	*Guilford*	Old Town
Farwell, Howard Lovering, Me.	*Dorchester, Mass.*	Φ Γ Δ House
Finnigan, Edward Joseph, Ce.	*Bangor*	Ω A Υ House
Fogler, William Andrews, Ee.	*West Rockport*	Σ X House
French, Guy Clifton, Ce.	*Skowhegan*	109 Oak Hall
Fulton, Charles Melville, Ce.	*Effingham Falls, N. H.*	Θ E House
Gardner, Edward Earle, Pm.	*East Machias*	Σ A E House
Gerrity, Joe Warren, Ec.	*Bangor*	K Σ House
Gilbert, William Gilbert, Me.	*So. Glastonbury, Ct.*	Σ A E House
Haggett, Harold Daniel, Ce.	*Bath*	Ω A Υ House
Hall, Earle Wilmer, Ee.	*Farmington*	A T Ω House

Ham, Philip Winthrop, Ce.	*Livermore Falls*	Φ K Σ House
Harmon, Ralph Chase, Ee.	*Woodfords*	Σ X House
Harvey, Florence Evelyn, Rm.	*Orono*	Main St.
Harvey, Walter Ora, Me.	*Kenduskeag*	Θ E House
Harvey, Willis Lake, Ee.	*Orono*	Main St.
Henry, Ralph Morton, Ee.	*Cumberland Mills*	308 Oak Hall
Higgins, Harrison Parker, Me.	*Somerville, Mass.*	Σ Λ E House
Holton, Carl Russell, Ce.	*Boothbay Harbor*	Ω Λ Υ House
Hutchinson, Arthur Nash, Ch.	*Cherryfield*	Σ X House
Jackson, Ralph Lysander, Ce.	*Jefferson*	Σ Λ E House
Jewett, John Nelson, Ce.	*Cherryfield*	Σ X House
Johnson, Howard Rich, Ee.	*South Portland*	307 Oak Hall
Keating, Edmund Bernard, Ce.	*Salem, Mass.*	Θ X House
Keating, Joseph Sylvester, Ec.	*Red Beach*	54 No. Main St.
Keith, Ballard Freeze, Lt.	*Old Town*	Φ Γ Δ House
Kimball, Winfield Alfred, Fy.	*Norway*	Φ K Σ House
Kinghorn, Charles Wesley, Ee.	*Yarmouthville*	Mill St.
Knight, Frederick Daniel, Ee.	*Limerick*	Φ K Σ House
Knight, Mattie Grover, Bl.	*Deer Isle*	Mt. Vernon House
Littlefield, Joseph Philip, Ee.	*Ogunquit*	Λ T Ω House
Lockyer, Scott Sylvester, Fy.	*Eustis*	Λ T Ω House
Lynch, John Philip, Pm.	*South Berwick*	Λ T Ω House
McArthur, Chase, Gm.	*Milltown*	Park St.
Mason, Jesse Ham, Ch.	*Beverly, Mass.*	Σ X House
Mayo, Norman Haskell, Ce.	*Bluehill*	Σ X House
Merriman, Merle Eli, Me.	*Portland*	Φ K Σ House
Miller, Harold Redmere, Ee.	*South Berwick*	311 Oak Hall
Mooney, Percy Patrick, Ee.	*Bangor*	Bangor
Moor, Leon Russell, Ee.	*Ellsworth*	303 Oak Hall
Moore, Irving Hartwell, Ee.	*Readfield*	Β Θ Π House
Morgan, Edwin Randolph, Ms.	*Sangerville*	Θ X House
Morrell, Harry Edwin, Ce.	*Lewiston*	312 Oak Hall
Morrison, Robley Howe, Ch.	*Rumford Falls*	Σ Λ E House
Morton, Edward Watts, Ag.	*Kennebunk*	Σ Λ E House
Nash, Henry Leighton, Ee.	*Cherryfield*	Σ Λ E House
Nauman, George Valentine, Ec.	*Portland*	Ω Λ Υ House
Neal, Arthur Francisco, Ce.	*North Berwick*	Β Θ Π House
Osgood, William Thompson, Fy.	*Garland*	Myrtle St.
Paine, Charles Brooks, Ce.	*Eastport*	Main St.
Parker, Horace Albion, Ce.	*Livermore Falls*	301 Oak Hall
Patterson, Alfred Bassett, Me.	*Winslow*	307 Oak Hall
Penney, Paul Stinchfield, Ce.	*Augusta*	Park St.

Pettegrew, Herbert Tracy, Ce.	*East Machias*	Ω Λ Υ House
Pike, Lewis Freeman, Fy.	*Milton, N. H.*	Κ Σ House
Plumly, Clinton Alley, Ce.	*Lincoln*	Φ Κ Σ House
Pray, Elmer Onsville, Ce.	*Kittery*	Λ Τ Ω House
Randall, James William, Ce.	*Freeport*	Ω Λ Υ House
Ray, Vinton Royal, Ce.	*Sabattus*	Θ Ε House
Rich, Harold Arthur, Me.	*Bangor*	Β Θ Π House
Richardson, Frank Cummings, Ce.	*Jefferson*	Σ Α Ε House
Richardson, Irene Clara, Rm.	*Old Town*	Old Town
Roberts, Benjamin Lewis, Fy.	*Bangor*	Θ Ε House
Robinson, Reginald Elton, Me.	*Oxford*	Ω Λ Υ House
Rogers, Frederick Drummond, Me.	*Richmond*	Σ Χ House
Rollins, Kenneth Albert, Ec.	*Farmington Falls*	Φ Γ Δ House
Scales, James Grindle, Ch.	*Guilford*	Φ Γ Δ House
Shatney, Thomas Franklin, Fy.	*Orono*	28 Pine St.
Shaw, Christine Myrtle, Lt.	*Orono*	Park St.
Shaw, Cora Mae, Ms.	*Orono*	Park St.
Simmons, Francis Eaton, Me.	*Rockland*	Β Θ Π House
Smith, Allen G., Me.	*Jonesport*	Park St.
Smith, Dexter Southworth Johnson, Ec.	*Bangor*	Σ Α Ε House
Smith, Frank Folsom, Ce.	*Rumford Falls*	Σ Α Ε House
Smith, Herman Brackett, Me.	*Saco*	Φ Κ Σ House
Smith, Harry Woodbury, Ag.	*Sangerville*	Θ Χ House
Smith, Wilbur Olin, Ee.	*Peabody, Mass.*	Myrtle St.
Southwick, Everett Frost, Ag.	*Peabody, Mass.*	Myrtle St.
Sutton, Harry Edward, Hy.	*Orono,*	Bennoch St.
Sweetser, George Roy, Ec.	*Hampden,*	Commons
Thomas, Deane Stanley, Ec.	*Yarmouthville*	Θ Ε House
Torrey, Guy Ellicott, Ce.	*Deer Isle*	Κ Σ House
Towle, Elton LaForrest, Me.	*Portland*	Φ Γ Δ House
Tripp, James Woodbury, Pl.	*Orrington*	Commons
Turner, Richard Clinton, Ag.	*Portland*	College St.
Wescott, Thurman Cary, Ce.	*Patten*	Κ Σ House
White, Harry Alfred, Ce.	*Lynn, Mass.*	Κ Σ House
Wildes, Gordon Lunt, Ce.	*Skowhegan*	Κ Σ House
Williams, Guy Herbert, Ce.	*Manchester, N. H.*	Θ Χ House
Woodbury, Dwight Augustus, Ms.	*Beverly, Mass.*	Σ Χ House

SOPHOMORES

Alton, Edwin Samuel, Ee.	*Lynn, Mass.*	Θ Ε House
Ames, Leroy Winfield, Fy.	*Bangor*	Bangor

Ames, Monroe, Gm.	*Skowhegan*	18 Main St.
Andrews, Wales Henry, Me.	*Middleboro, Mass.*	B Θ Π House
Arnold, Frances Elizabeth Stanislaus, Rm.	*Orono*	North Main St.
Bagg, William Clarke, Fy.	*Utica, N. Y.*	B Θ Π House
Barker, Harold Louis, Ce.	*Boston, Mass.*	Σ X House
Battles, James Edmund, Ee.	*Frankfort*	Myrtle St.
Baylies, Wallace Brownell, Ce.	*New Bedford, Mass.*	211 Oak Hall
Berry, Earle Sylvester, Ee.	*Malden, Mass.*	Σ X House
Berry, Stewart Francis, Ee.	*Malden, Mass.*	Σ X House
Bigney, Frederick Rowe, Ee.	*Greenville*	Ω Λ Υ House
Bird, Roy James, Ch.	*South Paris*	Main St.
Blanchard, Ralph Childs, Ee.	*Cumberland Center*	College St.
Bragg, Lester Morse, Ce.	*Stockton Springs*	Φ Γ Δ House
Brown, Daniel Grover, Ce.	*South Paris*	College St.
Burch, Joseph Francis, Ce.	*Biddeford Pool*	Main St.
Burke, Alfred Kimball, Ch.	*Kennebunk*	Σ A E House
Callahan, Edgar Frederick, Ed.	*Orono*	57 Mill St.
Carle, Harry Pennell, Ce.	*Portland*	Φ Γ Δ House
Chadbourne, Vaughn Russell, Ee.	*Mattawamkeag*	Park St.
Chadwick, Harold Lincoln, Bl.	*Houlton*	Φ K Σ House
Chandler, Alfred Blanchard, Ee.	*Yarmouthville*	Mill St.
Chase, Walter Melville, Pm.	*Bangor*	Bangor
Clifford, Harold Linscott, Ce.	*Orono*	Hill St.
Cole, Harold, Ee.	*Paris Hill*	Main St.
Cole, Raymond Thurber, Me.	*South Portland*	Park St.
Collins, John Lambert, Ee.	*Gardiner, R. F. D. 15*	Main St.
Congdon, William Everett, Ee.	*Woodfords*	54 North Main St.
Conlogue, Frederick Willis, Ee.	*Houlton*	210 Oak Hall
Cook, Horace Jewett, Ce.	*Waterville*	A T Ω House
Corbett, Matthew, Jr., Fy.	*So. Norwalk, Ct.*	Bennoch St.
Corning, Grover Trites, Ec.	*Lynn, Mass.*	Φ K Σ House
Crocker, Ralph Willis, Ee.	*Bangor*	367 Essex St.
Cruickshank, Robert Bacon, Fy.	*Akron, Ohio*	B Θ Π House
Cummings, Chester Goodman, Me.	*Vanceboro*	Ω Λ Υ House
Danforth, Hugh Nagles, Me.	*Augusta*	A T Ω House
Davis, Fred Dumont, Fy.	*Brooks*	Myrtle St.
Dennison, Harry Philip, Ee.	*Bridgetown, N. S.*	Middle St.
Dodge, Roland Lester, Fy.	*North Islesboro*	202 Oak Hall
Dow, Frank Seavey, Ec.	*Sangerville*	Θ X House
Dyer, Howard Kenneth, Ce.	*Calais*	Σ X House

Dyer, John Raymond, Ce.	*Truro, Mass.*	104 Oak Hall
Eaton, James Murchie, Ee.	*Princeton*	Φ Γ Δ House
Everett, Jasper Willard, Ee.	*Oxford*	Θ X House
Fassett, Malcolm Edward, Ce.	*Portland*	Φ Γ Δ House
Fox, Kent Richard, Ch.	*Bangor*	B Θ Π House
Gardner, Albert Kinsman, Ag.	*Rockland*	B Θ Π House
Gardner, Leroy Whittier, Fy.	*Dennysville*	Θ X House
Gifford, George Endicott, Ch.	*Salem, Mass.*	Σ A E House
Goodrich, George Percy, Ee.	*Cornish*	Mill St.
Goodrich, Merton Taylor, Ms.	*Bingham*	North Main St.
Goodwin, Alexander Willard, Ce.	*Vanceboro*	Ω Λ Υ House
Gould, Ralph Wadlin, Ee.	*Belfast*	Stillwater
Graham, Charles Liguori, Ms.	*Brooklyn, N. Y.*	107 Oak Hall
Greenwood, Ralph Harrison, Ee.	*Presque Isle*	109 Oak Hall
Hall, Clifton Allison, Ee.	*Brewer*	Φ K Σ House
Harmon, W. Warren, Ec.	*Old Orchard*	Ω Λ Υ House
Howard, Francis Eaton, Ce.	*Brunswick*	North Main St.
Hayes, Howard Wadlin, Ag.	*Deering*	32 North Main St.
Hicks, Weston Milliken, Ce.	*Portland, R. F. D. No. 4*	Mill St.
Hobbs, Ralph Everett, Ee.	*Lynn, Mass.*	Θ E House
Holmes, Ralph Maynard, Ee.	*Ellsworth*	Σ X House
Huntington, Frances Willard, Hy.	*Lynn, Mass,*	Mt Vernon House
Jellison, Rupert A., Ch.	*Bar Harbor*	Ω Λ Υ House
Johnson, Chester Cleveland, Ce.	*Portland*	Σ A E House
Jones, Roy Chandler, Ee.	*Gardiner*	No. Main St.
Jordan, Edith Luella, Rm.	*Old Town*	Mt. Vernon House
Jordan, George King, Me.	*Westbrook*	Θ X House
Jordan, Harvey Herbert, Ce.	*Waltham*	2 Bennoch St.
Keen, Lewis Albert, Ee.	*South Paris*	112 Oak Hall
Ketchum, Charles Clayton, Ce.	*Ashland*	210 Oak Hall
Kinney, Fay Delancy, Me.	*Dexter*	Θ E House
Kyes, Herman Winslow, Ee.	*Ipswich, Mass.*	312 Oak Hall
Lamb, Ernest, Ec.	*Utica, N. Y.*	B Θ Π House
Leary, Arthur Joseph, Ce.	*Somersworth, N. H.*	Θ X House
Libby, Albert Edwin, Ce.	*Portland*	K Σ House
Littlefield, Roby Perkins, Ch.	*Ogunquit*	A T Ω House
Lowell, Elmer Blaine, Ee.	*West Farmington*	201 Oak Hall
Maddox, Austin Louis, Ce.	*Ellsworth*	2 Bennoch St.
Merriam, Frank Edmund, Me.	*Skowhegan*	Main St.
Merrill, Dimon Emery, Ee.	*Alfred*	204 Oak Hall
Merrill, Walter Scott, Ce.	*Skowhegan*	306 Oak Hall
Moore, Arthur Scudder, Ee.	*West Lynn, Mass*	Φ K Σ House

Norton, Raymond Pratt, Ch.	*Patten*	Ω Λ Υ House
Nucci, James Francis, Ce.	*Brooklyn, N. Y.*	107 Oak Hall
Oak, Allen Edson, Ce.	*Caribou*	Β Θ Π House
Owen, Philip Herbert, Me.	*Woburn, Mass.*	No. Main St.
Pettey, Franklin William, Bl.	*Fall River, Mass.*	Ω Λ Υ House
Philbrook, John Neal, Ce.	*Woodfords*	North Main St.
Phinney, Chester Squire, Rm.	*Pawtucket, R. I.*	Θ Χ House
Pickup, Herbert Wilfred, Ce.	*Ipswich, Mass.*	101 Oak Hall
Porter, Charles Augustus Cushman, Ce.	*Bangor*	Φ Κ Σ House
Pratt, Charles Oland, Ce.	*Revere, Mass.*	Θ Ε House
Redman, Ralph Woodbury, Ag.	*Corinna*	104 Oak Hall
Reed, Geneva Alice, Gm.	*Orono*	College St.
Reed, Marshall Everett, Fy.	*Roxbury*	Θ Χ House
Robinson, John Tyler, Rm.	*Sherman Station*	2 Middle St.
Rose, Joseph George, Ce.	*Brooklyn, N. Y.*	Θ Χ House
Royal, Harold Merton, Ee.	*Hermon*	Main St.
Russell, Edward Giddings, Ce.	*Eastport*	Σ Α Ε House
Sawyer, Frank Sleeper, Ce.	*Sabattus*	Θ Χ House
Sawyer, Nathan Howard, Ee.	*Cape Elizabeth*	Θ Λ House
Schierloh, August Herman Theodore, Gm.	*Brooklyn, N. Y.*	Σ Α Ε House
Sevrens, Oliver Fisk, Fy.	*North Woburn, Mass.*	Ω Λ Υ House
Simonton, Philip Downing, Me.	*Yarmouthville*	Mill St.
Skolfield, Herbert Nason, Ce.	*Brunswick, R.F.D. 2*	Φ Κ Σ House
Smith, Charles French, Ee.	*Skowhegan*	Φ Γ Δ House
Smith, Frank Folsom, Ce.	*Rumford Falls*	Σ Α Ε House
Snow, Edward Notley, Ee.	*Skowhegan*	306 Oak Hall
Springer, George Edwin, Ee.	*Portland*	Θ Ε House
Stickney, Charles Edwin, Me.	*Portland*	Φ Γ Δ House
Stoddard, Winfred Eugene, Ce.	*Guilford*	Θ Ε House
Stover, Isaac Maxwell, Ee.	*New Brunswick, N. J.*	Campus
Sweetser, Herman Pittee, Ag.	*Cumberland Center*	Σ Χ House
Tomlinson, Nora, Gm.	*Brantford, Ont.*	Main St.
Tracy, Clarence Curtis, Ce.	*Bridgeport, Conn.*	Mill St.
Travis, James Irving, Me.	*Machiasport*	Σ Α Ε House
Tucker, Charles Henry, Ce.	*Kittery Depot*	Α Τ Ω House
Wadsworth, Francis George, Pl.	*Sanford*	Α Τ Ω House
Wadsworth, George Sabine, Ag.	*Portland*	88 Main St.
Wallace, George Alexander, Fy.	*Portland*	Β Θ Π House
Webster, George Albert, Ee.	*Farmington*	201 Oak Hall
Wentworth, George Jacobs, Ee.	*Kennebunk Beach*	Crosby St.

Wentworth, William Hiram, Fy.	*Somersworth, N. H.*	Σ X House
Wheeler, Stanley Mathews, Fy.	*South Paris*	Φ K Σ House
White, Myra Isabel, Ed.	*Orono*	Mill St.
Wiley, Fred Everett, Ee.	*Hartford, Ct.*	Θ X House
Winters, Amos Arthur, Ce.	*Waterville*	K Σ House
Woods, Harry Morgan, Me.	*Orono*	Main St.
Workman, Thurlow Tracy, Ce.	*Sullivan Harbor*	Ω Λ Υ House
Wright, Harold Williams, Ce.	*Reading, Mass.*	Σ X House

FRESHMEN

Adams, Alfred Sanford	*Newport*	Mill St.
Atwood, Albert Samuel	*Phillips*	Peters St.
Attwood, Stanley Bearce	*Auburn*	Park St.
Averill, Helen Willard	*Milltown*	Mt. Vernon House
Bailey, Howard Earle	*Westbrook*	Θ X House
Barker, Jack Sears	*Calais*	Ω Λ Υ House
Bartow, William Edgar	*Utica, N. Y.*	40 North Main St.
Bearce, George Dunham	*Auburn*	B Θ Π House
Benjamin, Charles Smith	*Old Town*	Old Town
Bennett, Leslie	*Paris*	Φ K Σ House
Bennett, Lester Lathum	*Farmington*	Park St.
Bigney, Edmund Scammon	*Greenville*	K Σ House
Blaisdell, Allen Holt	*Bangor*	Bangor
Blaisdell, Guy Marble	*Farmington*	Peters St.
Blaisdell, Perl Era	*Hallowell*	38 Pine St.
Blanchard, Horace Stanley	*Blanchard*	Myrtle St.
Bradeen, Samuel Warren	*Milo*	Stillwater
Brown, Florence Evelyn	*Old Town*	Old Town
Brown, Jennie Christiania	*Orono*	Park St.
Bruhm, Clyde George	*South Boston Mass.*	Stillwater
Buck, Raymond Wilbur	*Monticello*	Σ X House
Burden, Harry Poole	*Lynn, Mass.*	Myrtle St.
Burgess, Harold Brainerd	*Rockland*	Main St.
Burke, John Joseph	*Chelsea, Mass.*	Mill St.
Buzzell, Ralph Waldo	*Rockport*	North Main St.
Carlisle, Ralph Harrison	*Patten*	College St.
Carr, John Oliver	*Bangor*	Bangor
Casey, Edmund Patrick	*Milltown*	Penobscot St.
Cavanaugh, Charles Alton	*Portland*	Bennoch St.
Chapman, George Bunker	*Augusta*	1 Main St.
Chase, Arthur Clifford	*Sheepscott*	Σ Λ E House

Chenery, Frederick Lincoln, Jr.	*Wayne*	2 Bennoch St.
Clark, Lowell Freeman	*Hampden*	208 Oak Hall
Cobb, Frank Collins	*So. Gardiner*	Σ Α Ε House
Coombs, David Clifford	*Auburn*	Κ Σ House
Cooper, Parker Messer	*Jefferson*	206 Oak Hall
Cummings, Nathan Clifford	*Gorham*	Φ Γ Δ House
Cushman, William Parsons	*West Pownal*	310 Oak Hall
Davis, Frederick Gordon	*Norridgewock*	3 Forest St.
Davis, Ralph Cushman	*Auburn*	Κ Σ House
Davis, Raymond Webber	*Guilford*	Φ Γ Δ House
Davis, Walter Francis	*Old Town*	Old Town
Day, Letitia Elizabeth	*Bangor*	Bangor
Day, Ralph Roscoe	*Cornish*	88 Main St.
Dinsmore, James Leigh	*Hallowell*	310 Oak Hall
Doore, Clarence Freeland	*Dover*	Ω Α Ψ House
Drew, Laurence Evans	*Brunswick*	Σ Α Ε House
Dunn, James Whitman	*Cumberland Center*	Main St.
Duran, David Ray	*Westbrook*	Ω Α Ψ House
Eastman, Henry Harland	*Limerick*	Α Τ Ω House
Eaton, Arthur Clement	*Wenham, Mass.*	203 Oak Hall
* Farwell, Frank Foster, Jr.	*Dorchester Ctr., Mass.*	Φ Γ Δ House
Fenn, Herbert Kenney	*Portland*	Σ Χ House
Fish, Fred Enoch	*Farmington*	Park St.
Fitch, LeRoy Allan	*East Sebago*	63 Mill St.
Flanagan, John Patrick	*Bangor*	Bangor
Folley, Delton Wharff	*Sangerville*	Park St.
Geery, Henry Clinton	*Katahdin Iron Works*	304 Oak Hall
* Geery, Louis Duncan Tallman	*Katahdin Iron Works*	304 Oak Hall
Gerrish, Charles Samuel	*Kittery Point*	Crosby St.
Gerrish, Leo Melville	*Berlin, N. H.*	Σ Α Ε House
Gifford, George Washington	*Dennysville*	Myrtle St.
Gilbert, Annie Hoadley	*Old Orchard*	Mt. Vernon House
Gilpatrick, Claude Hall	*Rumford Falls*	Σ Α Ε House
Gooch, Winslow Lamond	*Alfred*	Σ Χ House
Goodnow, Alden Church	*Fairhaven, Mass.*	Β Θ Π House
* Gould, William Sanford, Jr.	*Dexter*	Beech St.
* Hall, William Scribner	*Norwich, Conn.*	Commons
Hammond, Avery Carleton	*Orono*	Main St.
Harris, Hiram Elmer	*West Minot*	32 North Main St.
Hart, Ashton Halsted	*Presque Isle*	Κ Σ House

* In partial standing

Haskell, William Oleson	*Westbrook*	Φ Γ Δ House
* Haslem, Howard Giles	*Bangor*	Bangor
Hatch, Harrison Morton	*West Groton, Mass.*	Θ X House
Hayes, Leo Francis	*Southbridge, Mass.*	Θ X House
Hebard, William Everett	*Fiskdale, Mass.*	Bennoch St.
Henderson, Robert Raymond	*Madison*	Bennoch St.
Hill, Walter George	*Bar Harbor*	Θ E House
Holmes, Oliver Wendell	*Eastport*	2 Middle St.
Hooper, Irvin Frothingham	*West Lynn, Mass.*	No. Main St.
Hosmer, George Lawrence	*Rockland*	Δ T Ω House
Houghton, Thomas Edward	*Ft. Fairfield*	Θ E House
Howe, George Henry, Jr.	*Caribou*	Beach St.
Howes, Harry Winslow	*Middleboro, Mass.*	Ω Δ Υ House
Ingersoll, Frederick McCormisky	*Auburn*	Φ Γ Δ House
Ingham, Harold William	*Haverhill, Mass.*	Δ T Ω House
Johnson, Walter Hauteville	*Oakland*	Θ X House
Jones, Maurice Daniel	*Unity*	North Main St.
Jones, Sidney Morrison	*Bangor*	B Θ Π House
Kavanah, Gladys Emma	*Bangor*	Bangor
Kilburn, Percy Gordon	*Ft. Fairfield*	Beach St.
King, James Putnam	*Peabody, Mass.*	Myrtle St.
Kingsbury, Forrest Pearl	*Brewer*	Brewer
Kingsley, Ernest Roy	*Yarmouthville*	6 Water St.
Leavitt, George Clark	*Norway*	108 Oak Hall
LeBaron, ReRoy Morse	*West Wareham, Mass.*	College St.
Lee, Horace Newton	*Greenwood, Mass.*	College St.
Leikin, Abraham William	*New Britain, Ct.*	205 Oak Hall
Libby, Arthur Clarence	*Scarboro*	Myrtle St.
Lord, George Lester	*South Berwick*	53 Mill St.
Loring, Charles Sewall	*Jay*	K Σ House
Luce, Ray Thomas	*Carmel, R. F. D. No. 2*	Bangor
Lycette, Cecil Leland	*Houlton*	103 Oak Hall
McCarthy, Maurice Franklin	*Lewiston*	K Σ House
* McHale, Martin Joseph	*Stoneham, Mass.*	Θ E House
Markle, Bert Christian	*Northampton, Mass.*	Σ Δ E House
Marshall, Robert Clarence	*Wellesley, Mass.*	Θ X House
Maxcy, Everett Haseltine	*Gardiner*	Pine St.
* Merrell, James Raymond	*North Adams, Mass.*	Ω Δ Υ House
Morrison, Freeland John	*Rumford Falls*	Σ Δ E House
Nason, Fred Warner	*Haverhill, Mass.*	Δ T Ω House

* In partial standing

Noyes, Robert Jackman	*Georgetown, Mass.*	Α Τ Ω House
Oak, Donald Prescott	*Bangor*	Α Τ Ω House
* Osborne, Atlee Burpee	*Ft. Fairfield*	Beach St.
Parsons, Wallace Emery	*North Anson*	Β Θ Π House
Patch, Clifford	*Bangor*	Bangor
Patterson, Ralph Edwin	*Bangor*	Bangor
Peaslee, Dana Newton	*Lynn, Mass.*	4 Myrtle St.
Peckham, Wentworth	*Lewiston*	Β Θ Π House
Perkins, Lewis West	*Ogunquit*	39 North Main St.
Perkins, Louis Turner	*Middleboro, Mass.*	Θ Χ House
Philbrook, Beulah Frances	*Sanford*	Bangor
Philbrook, Frank William	*Greene*	312 Oak Hall
Phillips, George Alfred	*Westbrook*	Α Τ Ω House
Pinkham, Charles Joseph	*Farmington, R.F.D. No. 5*	Pine St.
* Pinkham, Niles Cassius	*Portland*	Φ Γ Δ House
Pond, Ralph Benjamin	*Bangor*	Φ Γ Δ House
Prentiss, Mildred Louise	*Brewer*	Mt. Vernon House
Quinneen, Charles Roger	*Chelsea, Mass.*	Mill St.
Rea, Charles Drummond	*Southwest Harbor*	Penobscot St.
Reed, Philip Page	*Orono*	College St.
Richardson, Arthur Berry	*Rockland*	Β Θ Π House
* Robinson, Chauncey Stephen	*Portland*	Φ Γ Δ House
Rogers, Luther	*Patten*	Κ Σ House
Russell, Harl Lowell	*Dexter*	Myrtle St.
* Rowe, Charles Winfield	*East Oxford*	10 Pine St.
Ryan, Philip Eary	*Milltown*	Σ Α Ε House
Sargent, Harold Rodolph	*Melrose, Mass.*	Θ Ε House
Sawtelle, Philip Perry	*Augusta*	1 Main St.
Scales, Nelson Ned	*Guilford*	Φ Γ Δ House
Scott, Arthur Leon	*Portland*	Κ Σ House
Shaw, Louis Ethelbert	*Orono*	Mill St.
Shorey, Ralph Oscar	*Foxcroft*	Stillwater
Shute, Clyde Ralph	*Belfast*	305 Oak Hall
Sisson, Elmer Allen	*So. Middleboro, Mass.*	College St.
Smith, Nelson Ernest	*Peabody, Mass.*	Myrtle St.
Smith, Russell	*Auburn*	Κ Σ House
Snow, Charles Augustus	*Milo, R. F. D. No. 2*	Bangor
Southard, Frank Elwyn	*Lewiston*	Κ Σ House
Strout, Philip Stanwood	*South Portland*	Θ Ε House
* Sturtevant, Arthur Leroy	*Milo*	Park St.

* In partial standing

Sumner, Merton Rogers	*South Paris*	Φ K Σ House
Tarbell, Leon Clive	*Smyrna Mills*	Stillwater
Taylor, Florence Anna	*Hermon*	Park St.
Tibbetts, Raymond Winslow	*Camden*	2 Mill St.
Thompson, Lynwood Burkett	*Belfast*	305 Oak Hall
Tobey, Elmer Robert	*Norridgewock*	3 Forest St.
Towne, Harland Eugene	*East Dover*	Stillwater
* Van Horn, Horace Millard	*W. Philadelphia, Pa.*	Φ Γ Δ House
Vaughan, William, Jr.	*Belfast*	305 Oak Hall
Verrill, Albert	*Cumberland Mills*	53 Mill St.
Vickery, Harry Whitman	*East Auburn*	No. Main St.
Waite, Sumner	*Portland*	Φ Γ Δ House
Wakefield, George Arthur	*Lisbon*	Φ K Σ House
Wakefield, Oscar Abel	*Lisbon*	Φ K Σ House
Walker, Ernest Thaxter	*Biddeford*	Φ K Σ House
Warren, Benjamin Otis	*Fryeburg*	B Θ Π House
Weeks, Allen Henry	*Augusta*	Main St.
Wells, Nathan Holmes	*Kennebunk*	Crosby St.
Wertheim, Leslie Jack	*Berlin, N. H.*	B Θ Π House
Wescott, Stanley Leslie	*Patten*	K Σ House
Wetherell, John Gamble	*Portland*	54 North Main St.
Wheeler, Robert Wass	*South Paris*	Φ K Σ House
Whitney, Benjamin Burbank	*Strong, R. F. D. No. 1*	Park St.
Whittier, Earle Ovando	*Farmington*	Θ E House
Williams, Boardman Stevens	*Ft. Fairfield*	Φ Γ Δ House
Wilson, Harrison Morton	*Cherryfield*	Σ X House
Wilson, Winthrop Field	*Portland*	Σ X House
Wood, Harold Grinnell	*Hallowell*	Σ Δ E House
Woods, Lawrence Porter	Calais	North Main St.
Wyman, Perley Hammond	*Hampden*	Ω Δ Υ House
Young, Mary Kathleen	*Greenville Jct.*	Mt. Vernon House

SHORT PHARMACY COURSE

SECOND YEAR

Bartlett, Fred Ellward	*Westbrook*	Ω Δ Υ House
Bradish, Howard Gilson	*Calais*	Σ Δ E House
Fulton, Ellwyn Mortimer	*Blaine*	Σ X House
Ormsby, William Herbert	*S. Portland, R.F.D. No.8*	Myrtle St.
Ridlon, Myron Herbert	*Kezar Falls*	Pine St.

* In partial standing

Sewall, Howard Newton	*York Village*	Myrtle St.
Ward, George Campbell	*Kennebunk*	Α Τ Ω House

FIRST YEAR

Barker, Lester Alonzo	*Island Falls*	Main St.
Carlton, John Dana	*Rangeley*	40 North Main St.
Cheney, Hill Harrison	*Monticello*	10 Pine St.
Jaffe, Harry	*Newport, R. I.*	Orono House
Kelleher, Adrian Fitzgerald	*Orono*	53 Mill St.
LeBrun, Arthur Albert	*Old Town*	Old Town
Mann, Roy Edward	*Van Buren*	Old Town
Merrill, Clyde Harold	*Auburn*	Φ Γ Δ House
Miller, Orrin Linwood	*Carmel, R. F. D. No. 3*	Penobscot
* Richard, Charles Donozor	*Auburn*	40 North Main St.
Shorey, Theodore Newell	*City Point*	210 Oak Hall

SPECIAL STUDENTS

Bowdoin, Emery Ray	*Prospect*	No. Main St.
Britton, Annie Pauline	*Bangor*	Bangor
Bruce, Herbert Putnam, Ce.	*Lynn, Mass.*	Θ Ε House
Bumps, Imogene Martha	*Dexter*	Mt. Vernon House
Burns, William Hugh	*Dennysville*	Park St.
Burrill, Guy Hadley	*Dedham*	Brewer
Burrill, Harold Simeon	*Dedham*	Brewer
Chase, Mary Ella	*Bluehill*	Mill St.
Clifford, Harry Benjamin, B. A. Harvard, 1907	*Franklin, N. H.*	78 No. Main St.
Codaire, Alfred Hotchkiss	*Collinsville, Conn.*	204 Oak Hall
Coker, John James	*Salem, Mass.*	53 Mill St.
Cook, Albert Freemont	*Bangor*	Α Τ Ω House
Cook, Walter Arthur	*Milton, Mass.*	Campus
Deering, George Percy	*Winslow's Mills*	Θ Ε House
Derby, Frank Holliday	*Revere, Mass.*	Myrtle St.
Doolittle, Albert Whiting	*Hackensack, N. J.*	Campus
Elliott, William M.	*Somerville, Mass.*	Κ Σ House
Evans, Sidney Gurney	*Waldo*	206 Oak Hall
Faulkner, William Thomas	*Curtis Corner*	Θ Χ House
Foote, Frederick William	*Veazie*	Veazie
Fortier, Frank Eugene	*Turner Center*	Ω Λ Υ House

* In partial standing

Godfrey, Harold Ernest	*Sabattus*	Main St.
Gooch, Carl Joseph	*Biddeford*	Main St.
Hadlock, Harry William	*Yarmouth*	Main St.
Hilton, William	*Greenville*	Φ K Σ House
Homans, Harry	*North Vassalboro*	Mill St.
Houghton, Arthur Clarke	*Marlboro, Mass.*	A T Ω House
Hughes, Melvine Russell	*Bath*	1 College St.
Kelley, Frances	*Old Town*	Old Town
Knowlton, Daniel Fred	*Lowell, Mass.*	Θ E House
LaMarche, George Everett	*Orono*	Oak St.
Leary, Herbert Daniel	*East Boston, Mass.*	Θ X House
Leland, Clarence Roy	*Mechanic Falls*	North Main St.
Lennon, Stephen John	*Woodfords*	K Σ House
Leslie, Edward Warren	*Millinocket*	Old Town
Linn, Tsi Sheng	*Hong Kong, China*	106 Oak Hall
McElroy, Joseph Walter	*Manchester, N. H.*	2 Bennoch St.
MacLean, Daniel Wallace	*Eastport*	College St.
McManus, Margaret Ellen	*Bangor*	Bangor
Metcalf, Donald Clifton	*Old Town*	Old Town
Morin, Joseph C.	*Fort Kent*	Beach St.
Morrill, Raleigh Dudley	*Stafford, Vt.*	Commons
Munoz, Eugenio Luis	*Ponce, Porto Rico*	Middle St.
Rackliffe, Colby Alden	*Belfast*	Stillwater
Scales, Eugene Mudgett	*Guilford*	Θ E House
Scammon, William Francis	*Berlin Mills, N. H.*	54 No. Main St.
Shaw, Hugh Earle	*Greenville*	K Σ House
Smith, George Lewis	*Long Cove*	Σ X House
Stinchfield, Otis Decker	*Danforth*	Σ A E House
Taft, Leonora Ellen	*Boston, Mass.*	Mt. Vernon House
Thurlow, Myra Dunn	*Orono*	Park St.
Walden, Harold George	*Greenville*	College St.
Watson, Bernice E.	*Gardiner*	Mt. Vernon House
Weld, Edith Claire	*Old Town*	Old Town
Whitmore, James Leon	*North Haven*	10 Pine St.
Winchester, Sidney Hodge	*Corinna*	North Main St.

SCHOOL OF AGRICULTURE

SECOND YEAR

Cook, Alfred Searles	*Presque Isle*	
Fogg, George Phillips	*Hull's Cove*	Myrtle St.
Lindsay, Alvin Harold	*Carroll*	35 Mill St.
Twitchell, Bernard Franklin	*South Paris*	112 Oak Hall

FIRST YEAR

Bates, Irving Willard	*Corinna*	54 North Main St.
Bigney, Samuel Benjamin	*Greenville*	Stillwater
Boston, Lawrence Baker	*Biddeford*	Peters St.
Dow, John Howard	*Castle Hill*	63 Mill St.
Harris, Robert Burton	*Waldoboro*	63 Mill St.
Leach, Ernest Comins	*East Eddington*	Park St.
Look, Harry Monroe	*Jonesboro*	Beach St.
Merrill, Chester M.	*South Paris*	303 Oak Hall
Richardson, Willard Davis	*Bangor*	10 Pine St.
Small, Delma Rhoades	*Litchfield*	Old Town
Spear, Tom Sawyer	*North Leeds*	Mill St.
Walker, James Loten	*Oxford*	Myrtle St.
Welch, Forrest Elsworth	*Bridgewater*	44 North Main St.

SUMMER SESSION

(Abbreviations indicate subjects taken)

Alden, Carolin	*Hampden*	Ch., Ps.
Teacher of English in High School E. Orange, N. J.		
Alton, Edwin Samuel	*Lynn, Mass.*	Eh., Hy., Rm.
Bailey, Ralph Edwin Gilmore	*Easton*	Gm., Ms., Rm.
Bowdoin ex- '08. Principal High School.		
Barker, Harold Lewis	*Boston, Mass.*	Hy., Ps.
Benjamin, Charles Smith	*Old Town*	Lt., Ms., Rm.
Blair, Arthur Adolphus, B. D.	*Old Town*	Eh.
Tufts Theological School, Medford, Mass, 1895. Pastor Universalist Church.		
Boyle, Claude	*Dover*	Ch.
Buchanan, William James	*Old Town*	Eh.
Mt. Allison University, N. B. Pastor Methodist Church.		
Chandler, Abby Agnes	*Dexter*	Eh., Lt.
Teacher in High School.		
Chase, Arthur Clifford	*Sheepscot*	Ms.
Coombs, Evelyn Burrington	*Bardwells Ferry, Mass.*	Eh., Ms.
Teacher Jacob Tome Institute, Port Deposit, Md.		
Corning, Grover Trites	*Lynn, Mass.*	Ms., Ch.
Crocker, Carrie Jane	*Millinocket*	Bl., Eh.
Cummings, Nathan Clifford	*Gorham*	Ch., Ms., Ps., Rm.
Cutler, Sam Meyer	*Old Town*	Ch., Lt., Ms.
Denham, Cecile Gladys	*Bowdoinham*	Eh., Lt., Rm.
Dixon, Leon Snell	*Orono*	Ps.

Dixtrom, Ernest Edmund — *Brewer* — Gm., Ms., Rm.

Donahay, Etta — *Freehold, N. J.* — Eh., Gm.
Mt. Holyoke College. Teacher of English and History in High School.

Estabrooke, Marion Corthell — *Orono* — Rm.

Eveleth, Harry Pope — *Greenville Jct.* — Eh., Hy.

Farnsworth, Alice Belle — *West Sullivan* — Eh., Gm., Hy., Rm.

Fernald, Thomas Wentworth — *Waverley, Mass.* — Lt., Rm.

Foote, Frederick William — *Veazie* — Eh., Gm., Hy.
Bangor Theological Seminary. Pastor Congregational Church.

Gray, Maurice Herbert — *Old Town* — Rm.

Griffin, Howard Cousens, B. A. — *Bangor* — Gm., Rm.
Bowdoin. Instructor in Chemistry, Hobart College, Geneva, N. Y.

Grindle, Thomas Scott — *So. Penobscot* — Ms., Rm.

Hall, William Dickson, B. S. — *Rockland* — Ch., Eh.
University of Maine, 1907. Sub-master Aroostook Normal School.

Hamlin, George Harold — *Orono* — Ms., Rm.

Hassett, Harry Charles — *Rumford Falls* — Ch., Eh., Rm.

Hatch, Roy Otis — *W. Groton, Mass.* — Hy., Ps., Rm.

Heath, George Byron, Ph. B. — *Calais* — Eh., Ps.
Tufts College, Medford, Mass, 1899.

Hopkins, Mattie Ellen — *W. Lynn, Mass.* — Eh., Rm.

Hooper, Irwin Frothingham — *Fort Fairfield* — Eh.
Teacher in High School.

Houghton, Arthur Clarke — *Marlboro, Mass.* — Hy., Ms.

Hunt, Barbara, B. A. — *Bangor* — Bl., Ch., Gm.
Vassar College, 1906.

Hurd, Sarah Cooper — *Orono* — Gm.
Albion College.

Hutchinson, Arthur Nash — *Cherryfield* — Hy., Ms.

Infiorati, Matteo — *Bangor* — Ms.

Jackman, Harold Edward — *Sherman Mills* — Eh., Hy.
Principal of Smith Grammar School, Augusta.

Kennison, Chrystine Gordon — *Waterville* — Eh., Rm.

Kent, Benjamin Calvin — *Stillwater* — Ch., Ps., Rm.

Kingsbury, Forrest Pearl — *Brewer* — Hy., Ps.

Knowlton, Daniel Fred — *Lowell, Mass.* — Ms.

Lancaster, Howard Augustus — *Old Town* — Hy.

Latno, Alice Mae — *Orono* — Eh., Rm.

Linton, Jennie Mae — *Houlton* — Eh., Hy.
Colby College, Chicago University. Preceptress Ricker Classical Institute.

Little, Mary Viley, B. A. *Memphis, Tenn.* Eh.
Wellesley, 1903. Teacher in High School.

Lord, Harriet Belle *Auburn* Ch., Ps.
Bates College. Teacher Freeport High School.

Maddocks, Chester Arthur *Ellsworth* Ch., Rm.
Teacher in Military School, Bordentown, N. J.

McCue, William Coleman *Berwick* Eh., Hy.
Colby College. Principal Grammar School.

McNeil, Harry Daniel *Bangor* Lt., Rm.

Merriam, Charles Bailey *Prout's Neck* Eh., Ms., Hy.
University of Maine. University of Virginia.

Miner, Henry LeRoy *Haverhill, Mass.* Ch.

Morse, Warren, B. A. *Brewer* Eh., Rm.
Williams College, Yale Theological School, 1899. University of Maine, 1907. Pastor First Congregational Church.

Oakes, Walter True *Milford* Eh., Ms.

O'Brien, Edward Francis *Old Town* Lt., Ms.

Parker, Melvina Valentine *Belfast* Ch., Eh., Ms., Rm.
Teacher in High School.

Parlin, Amber Loren, B. A. *Lewiston* Ch., Ps., Rm.
Bates College, 1904. Instructor in Physics and Chemistry in High School, Whitman, Mass.

Patch, Clifford *Bangor* Ch., Eh., Ms.

Peabody, Ellen Holway *Machias* Bl., Eh., Gm., Hy.

Perkins, DeForest Henry, Ph. B.,
M. A., LL. B. *Skowhegan* Eh.
University of Maine, University of Chicago, Indiana University. Principal of High School.

Perkins, Lena Georgia *Oxford* Bl., Eh., Hy., Ms.
Teacher in High School.

Phelps, Elmer LeRoy *Old Town* Eh., Hy.

Pierce, Louise Norris, B. A. *Old Town* Eh., Gm.
Wellesley College, 1900. Teacher in High School.

Purcell, Mary Catherine *Rutland, Vt.* Bl., Eh., Hy., Rm.

Reed, Philip Page *Orono* Ms., Rm.

Rice, Marie Cecilia, B. S., M. S., *Bangor* Eh., Ms., Ps.
University of Maine, 1902. Teacher in High School.

Ropes, Alice Rogers, B. A. *Bangor* Ch.
Bryn Mawr College, 1902. Teacher of Mathematics and Physics at Jacob Tome Institute, Port Deposit, Md.

Ropes, Ellen Marvin, B. A. *Bangor* Gm., Rm.
Bryn Mawr College, 1902.

Sampson, Arthur Haskell *Gorham* Hy.
Small, Frances Clyde, B. A. *Addison* Eh., Hy.
Wellesley, 1905. Instructor in English and History in Bar Harbor High School.
Small, Irving Wheelock *So. Beddington* Eh., Ps., Rm.
Teacher in Mitchell Military School, Billerica, Mass.
Snow, George William *Old Town* Lt., Ms.
Stanley, Winthrop Hamor *Hull's Cove* Eh., Gm., Rm.
Stanwood, George Sidney *Rumford Falls* Ch., Eh., Ms.
Strout, Clarence Allen *Milbridge* Ch., Ps.
Sturtevant, Walter Linwood *Bangor* Bl., Ch., Eh., Hy., Gm.
Taft, Leanore Ellen *Boston, Mass.* Bl., Gm., Hy., Ms.
Taylor, Russell Shepard *Skowhegan* Gm., Hy., Ms.
Taylor, Thomas Francis, B.A., M.A. *Bangor* Gm., Lt.
University of Maine, 1904. Dartmouth College, 1905. Principal Orono High School.
Tibbetts, William Herbert *Bangor* Eh., Rm.
Principal So. Thomaston High School.
Tooker, Thomas Cox, A. M. *Cherryfield* Ch.
Colby College, 1896.
Trask, Warren Dudley *Augusta* Hy., Gm.
Van Horn, Horace Miller *W. Philadelphia, Pa.* Bl., Gm., Ms.
Wade, Mary Isabelle *Portland* Eh., Gm., Lt., Hy.
Wakefield, Sylvia Serena *Saco* Eh., Gm., Rm.
Wass, Clifton Ennis *Sangerville* Eh., Lt., Gm.
Superintendent Schools, Sangerville and Greenville.
Wells, Nathan Holmes *Kennebunk* Eh., Lt.
Wentworth, George Jacobs *Kennebunk Beach* Ms.
Woods, Harry Morgan *Orono* Ch., Gm.
Woodward, Jeanette Reanhard *New Brighton, N. Y.* Eh., Rm.
Teacher at Jacob Tome Institute, Port Deposit, Md.
Woollacott, Fred *Orono* Eh., Rm.

THE COLLEGE OF LAW

GRADUATE STUDENTS

Blanchard, Benjamin Willis, LL. B. *Bangor* 118 Congress St
University of Maine, 1904
Bowker, Edgar Marshall, LL. B. *Whitefield, N. H.*
George Washington University, 1902

Bridges, Corril Ellsworth, LL. B. *Charlestown, Mass.*
Albany Law School, 1887
Brown, Leon Gilman Carleton, LL.B. *Milo*
University of Maine, 1905
Buckley, John, LL. B. *Stafford Springs, Ct.* 350 Union St.
University of Maine, 1907
Clough, George Edwin, LL. B. *Monson, Mass.*
University of Maine, 1904
Cotton, Carl, B. A., LL. B. *Contoocook, N. H.*
Colby College, 1900. University of Maine, 1906
Cook, Harold Elijah, LL. B. *Waterville*
University of Maine, 1900
Davis, Waldo Trevor, B. A., LL. B. *Worcester, Mass.*
Dartmouth College, 1901. University of Maine, 1905
Dunn, Patrick Henry, LL. B. *Bangor* Bass Building
University of Maine, 1902
Folsom ReRoy Rowell, B. S., LL. M. *South Norridgewock*
University of Maine, 1895, 1907
Foster, Walter Herbert, LL. B. *Dorchester, Mass.*
University of Maine, 1905
Fox, Lewis Edwin, LL. B. *Worcester, Mass.* 100 Parker St.
University of Maine, 1906
Graton, Claude Dewing, LL. B. *Burlington, Vt.*
University of Maine, 1900
Heard, Carlos Clayton, B. A. *Biddeford*
Yale University, 1896
Johnson, William Asbury, LL. B. *Milo*
University of Maine, 1905
Kenniston, Hartley Garfield, LL. B. *Bangor* 38 Court St.
University of Maine, 1902
Libby, Arthur Stephen, B. A. *Spartanburg, S. C.*
University of Maine, 1903
Linehan, Daniel Joseph, LL. B. *Haverhill, Mass.*
University of Maine, 1905
Lord, Harry, LL. B. *Bangor* 82 Cumberland St.
University of Maine, 1902
Merrill, John Bryant, LL. B. *Bangor* 18 Jefferson St.
University of Maine, 1904
Monroe, Edward Roy, LL. B. *Portland*
University of Maine, 1907
Noble, Ernest Eugene, B. A., LL. B. *Portland*
Colby College, 1897. University of Maine, 1903

Perkins, DeForest Henry, Ph. B., M. A., LL. B. *Skowhegan*
University of Maine, 1900, 1905. Illinois College of Law, 1906
Putnam, Varney Arthur, B.A., LL.B. *Danforth*
Colby College, 1899. University of Maine, 1902
Plumstead, Frank, B. A., LL. B. *Bangor* 75 Hammond St.
Bates College, 1896. University of Maine, 1901
Record, Lewis Stillman, Ph. B., LL. B. *Ashland, N. H.*
Brown University, 1902. University of Maine, 1905
Reid, Charles Hickson, LL. B. *Bangor* 60 Lincoln St.
University of Maine, 1903
Robinson, Curville Charles, LL. B. *Flatbush, N. Y.*
University of Maine, 1905
Robinson, William Henry, LL. B. *Bangor* 42 Hammond St.
University of Maine, 1902
Selkirk, Robert William, LL. B. *Boston, Mass.*
University of Maine, 1902
Violette, Nil Louis, B. A., LL. B. *Van Buren*
St. Mary's College. University of Maine, 1903
Waterhouse, William Henry, LL. B. *Old Town*
University of Maine, 1900

SENIORS

Andrews, Percy Melville, B. A. *Portland* 25 State St.
Colby College, 1901
Blossom, Charles Albert Gooding *New Bedford, Mass.*
[Beta Theta Pi, Orono
Burgess, Frank Beaumont *Sangerville* 229 State St.
Davidson, Edward Burleigh *York Village* 229 State St.
Driscoll, George Alexander *Springfield, Mass.* 24 Ohio St.
Villanova College
Gardner, Henry, Jr. *Brockton, Mass.*
[Beta Theta Pi House, Orono
Goss, Ralph Wentworth *Berwick* 48 Summer St.
Member of Maine State Bar
Hamilton, Willard Packard, B. A. *Caribou* 111 Fourth St.
Bates College, 1895
Holman, William Harrison *Dixfield* 316 Hammond St.
Leary, Thomas Edward, B. S. *East Hampden* East Hampden
University of Maine, 1904
Maxwell, James Davidson *Bangor* 27 Grant St.
Nolan, Harry McDonald *Haverhill, Mass.* 350 Union St.

Purinton, Frank Howard, B. A. Bates College, 1896. Yale Law School	*Lewiston*	Y. M. C. A. Bldg. Senior
Rideout, Morton Howard	*Bangor*	Cor. Congress and [Fountain Sts.
Ridlon, Horace Denver	*Stetson*	23 Jefferson St.
Seavey, Ernest Linwood	*Boston, Mass.*	350 Union St.
Skillin, Carroll Brown	*North Yarmouth*	28 Second St.
Waldron, William Linscott, B. A., M. A. Colby College, 1899. University of Maine, 1906	*Waterville*	28 Second St.

JUNIORS

Anderson, Albert Edward	*Portland*	79 Summer St.
Brackett, Harry Mortimer	*Berwick*	301 Main St.
Bridgham, Edward William	*Bridgton*	25 State St.
Cartier, Arthur Jean Baptiste	*Biddeford*	79 Summer St.
Elder, Harry Robertson	*Chicopee Falls, Mass.*	239 Essex St.
Emery, James Edgar	*Bangor*	49 High St.
Fitz-Randolph, Reginald Boston University, College and Law School	*Boulder, Colo.*	77 Broadway
Fraser, William Clayton	*Taunton, Mass.*	163 West Broadway
Gallagher, Thomas Francis	*Bangor*	34 Elm St.
Goss, Harold Isaac	*Berwick*	48 Summer St.
Kiernan, James Francis Brown University	*Wareham, Mass.*	123 Union St.
May, Seth University of Maine	*Auburn*	100 Ohio St.
Morrison, Roy	*Saco*	123 Union St.
Riggs, Verne Lester	*Livermore Falls*	100 Ohio St.
Sanders, Thomas Andrew	*Sangerville*	28 Second St.
Small, Cyrus Fremont	*Caribou*	79 Summer St.
Snow, Forrest Belmont	*Bluehill*	48 Summer St.
Taylor, John Edwin	*Skowhegan*	Orono
Toole, Christopher, Jr.	*Bangor*	48 Ohio St.

FIRST YEAR

Anderson, William Lewis University of Maine	*Hartland*	17 Prospect St.
Arey, Ralph Winfield	*So. Brewer*	So. Brewer
Bisbee, Theodore Wright	*Campello, Mass.*	163 W. Broadway
Caplan, Israel Harry	*Portland*	Y. M. C. A. Bldg.

Carlson, Oscar Lambert	*Lynn, Mass.* [Theta Epsilon House, Orono	
Cole, William Spratt	*East Corinth*	239 Union St.
Elmassian, Astor	*Lynn, Mass.*	47 Fifth St.
Evans, John Higgins	*Bar Harbor*	79 Kenduskeag Ave.
Grady, Edward Joseph	*Bangor*	92 First St.
Halliday, Frank Wade, B. A., M. A. Dartmouth College, 1901 and 1903	*Lewiston*	25 State St.
Havey, Andrew Percy, B. A. Bowdoin College, 1903	*West Sullivan*	147 Essex St.
Jones, Lawrence V. University of Maine	*Bangor*	37 Fifth St.
Jude, William Floyd Bowdoin College	*Ellsworth*	33 Jefferson St.
Lemaire, Charles Wendell	*Taunton, Mass.*	163 W. Broadway
Minott, Ralph Ramsdell	*Lynn, Mass.* [Theta Epsilon House, Orono	
Mitchell, Robie Lawton, B. A., University of Maine, 1907	West Newfield	17 Prospect St.
Packard, Bertram Everett, B. A. Bates College, 1900.	*Litchfield*	25 State St.
Patten, William Herbert, B. A., Ph. B. New York University. Taylor University, 1902	*Newport*	25 State St.
Perkins, James Blenn, B. A. Bowdoin College, 1903	*Boothbay Harbor*	77 Broadway
Sawyer, Joseph Warren	*Milbridge*	77 Broadway
Shedd, Merton Henry	*East Corinth*	239 Union St.
Taylor, Henry Nathan	*Portland*	Y. M. C. A. Bldg.

SPECIAL STUDENTS

Chandler, Carroll Delwin	*Bangor*	22 Short St.
Clancy, Frank Bernard	*Nashua, N. H.*	24 Ohio St.
Higgins, Percy Elmer	*Ellsworth*	33 Jefferson St.
Huntley, Ernest Devenport	*Harrington*	28 Second St.
Lewis, Charles Goodell	*New Bedford, Mass.*	350 Union St.

SHORT WINTER COURSES IN AGRICULTURE

Addis, John Abrou	Greenville
Bailey, Walter Lester	Andover
Bartlett, Leland Hubert	Harmony
Berry, Walter Rideout	New Gloucester
Fogg, Sidney Irving	Starks
Hayford, Hugh	Belfast
Hildreth, Edward Theodore	Bangor
McDonell, Angus Donald	Mechanic Falls
McVay, James Francis	Calais
Nelson, John Otis	New Gloucester
Perry, Bertram Charles	Milbridge
Robinson, Clarence Henry	Peru

GENERAL SUMMARY

Faculty

Professors	34
Associate Professors	2
Assistant Professors	11
Instructors	28
Lecturers	5
Tutors	3
Assistants and Other Officers	21
Total	104

College of Arts and Sciences	42
College of Agriculture	37
College of Technology	44
College of Pharmacy	31
College of Law	13
Agricultural Experiment Station	19

Members of the general faculty are included in the faculties of the separate colleges when they give courses which are required therein

Students

Graduate Students		21
Seniors		67
Juniors		112
Sophomores		132
Freshmen		182
Short Pharmacy, Second Year	7	
First year	11	18
Specials		56
School Course in Agriculture, Second year	4	
First year	13	17
Summer Term		93
Winter Course in Agriculture		12
College of Law, Graduate Students	33	
Seniors	18	
Juniors	19	
First year	22	
Special Students	5	97
		807
Duplicated		31
Total		776

Classification by Residence

Maine, by counties:		
Androscoggin	40	
Aroostook	34	
Cumberland	78	
Franklin	17	
Hancock	24	
Kennebec	30	
Knox	11	
Lincoln	10	
Oxford	37	
Penobscot	159	
Piscataquis	35	
Sagadahoc	7	
Somerset	26	
Waldo	18	
Washington	48	
York	43	617
Colorado	1	
Connecticut	8	
Iowa	1	
Massachusetts	103	
New Hampshire	19	
New Jersey	3	
New York	10	
Ohio	1	
Pennsylvania	1	
Rhode Island	3	
South Carolina	1	
Tennessee	1	
Vermont	2	154
China	1	
New Brunswick	1	
Nova Scotia	1	
Ontario	1	
Porto Rico	1	5
		776

Classification by Colleges

College of Arts and Sciences	180
College of Agriculture	94
College of Technology	384
College of Pharmacy	21
College of Law	97
	776

STUDENTS IN THE CORRESPONDENCE COURSE IN AGRICULTURE

Adams, Charles E.	Bangor
Adams, Frank E.	Huntingville
Aiken, Mary B.	Brewer
Armstrong, H. M.	Cape Cottage
Atkins, A. N.	Dexter
Bacon, Ralph M.	Bryant's Pond
Bailey, Walter L.	Andover
Baynum, Mary H.	Dexter
Beal, M. H.	E. Dover
Berry, F. N.	So. Bridgton
Berry, Leonard P.	Houlton
Billings, Margaret E.	Belfast
Bowman, H. G.	Hebron
Brandriff, E. B.	Newfield, N. J.
Brown, Louis F.	E. Dover
Burns, C. H.	Mechanic Falls
Clark, Ella M.	Farmington
Clark, E. W.	E. No. Yarmouth
Clough, Frank S.	Madison
Coffin, Mrs. F. B.	Gilead
Day, George W.	Waterboro
Dick, Emil	Auburn
Dick, Rudolph L.	Auburn
Dyke, S. L.	Douglass Hill
Eastman, A. A.	Dexter
Eastman, Wilbur H.	Corinna
Eaton, C. P.	Notch
Elliott, D. D.	Monmouth
Farnham, Harry E.	Bangor
Gartley, George E.	Presque Isle
Gile, Cora J.	Alfred
Glover, E. A.	Bowerbank
Glover, Ralph	Hebron
Grindle, J. L.	Northeast Harbor
Hall, Albert B.	Portland
Harding, B. E.	Danforth
Harriman, M. J.	Kent's Hill
Hayford, Ralph	Belfast
Hilton, Ethel May	E. Denmark
Homer, Roy R.	Bucksport
Hunting, Joseph V.	Welchville
Johnson, B. H.	Athens
Kantz, Henry	Farmington
Knowles, George H.	Dexter
Lane, Leonard	Dexter
Leavitt, Leonard C.	Kezar Falls
Leland, E. H.	Sangerville
Leland, F. W.	E. Sangerville
Livermore, E. W.	E. Dover
Lord, Erving E.	Fairfield
McGlauflin, Selden A.	Presque Isle
Marshall, M. A.	No. Bradford
Merrill, H. H.	Hebron
Merrill, S. W.	Sebec
Milton, Huston	Woodfords
Morrill, Harry E.	Foxcroft
Nickerson, L. B.	Belfast
Palmer, Fred S.	E. Sumner
Parker, H. P.	Brooklyn, N. Y.
Parkman, Fred	Skowhegan
Penney, J. W.	Augusta
Perkins, J. Y.	Penobscot
Porter, Guy C.	Houlton
Rich, V. May	Charlotte
Ring, H. S.	Sisco, Fla.
Robinson, Winslow L.	St. George
Rose, Ernest E.	Bath
Rose, Fred J.	Bath
Russell, O. Y.	Danforth
Sherman, George H.	Hampden
Smith, E. B.	E. Dover
Sprague, W. F.	Hartland

Stetson, W. C.	Waterville	Upton, J. F.	Winnegance
Stewart, John H.	Damariscotta	Watson, Lillian G.	So. Portland
Sukeforth, L. F.	Liberty	Webster, G. W.	Strong
Thompson, H. W.	Mapleton	Welsh, David L.	Brooklyn, N. Y.
Tibbetts, Rose L.	Corinna	West & Clement	Milo
Torrey, Erland C.	Dixfield	Whipple, Mrs. H. B.	Bingham
Townsend, J. R.	Augusta	Young, Parker	Lincolnville
Tyler, Emerson R.	Saco		

STUDENTS REGISTERED FOR THE COURSES GIVEN DURING FARMERS' WEEK, 1907

Abbott, F. A.	Orono	Fish, George	Old Town
Aiken, Mary B.	Brewer	Fogg, Harry W.	Hull's Cove
Allen, William	Denmark	Fogg, J. L.	Hull's Cove
Bachelder, C. H.	Dexter	Fogg, Willard O.	Hull's Cove
Bailey, Bernard A.	Wiscasset	Foss, E. C.	E. Dover
Barstow, Luville O.	Brewer	French, George H.	Augusta
Bean, W. N.	Old Town	Greeley, S. D.	Hampden
Bearce, Boydon	E. Holden	Gilman, F. H.	Boyd Lake
Benner, Andrew W.	Monmouth	Goodridge, Nathan E.	Orono
Benner, D. M.	Monmouth	Goodridge, Charles	Orono
Bennett, W. H.	Intervale	Gould, D. J.	Brunswick
Black, Hedley C.	Hebron	Hall, C. A.	Brewer
Brett, B. C.	Auburn	Hall, S. C.	Kennebunk
Brown, Louis F.	E. Dover	Hardison, H. S.	Caribou
Brown, Moses E.	Topsfield	Heald, Clair V.	Gardiner
Chandler, C. G.	Silver's Mills	Hopkins, Harry	E. Holden
Chapman, Eugene	New Sharon	Homer, R. R.	Bucksport
Cleaves, F. W.	Sangerville	Homer, Urban A.	Bucksport
Clement, Wilson O.	Milo	Huff, J. E.	Topsfield
Coffin, George P.	Freeport	Hunt, George	Bangor
Copeland, Roscoe	Dexter	Hunt, Mrs. George	Bangor
Craig, John B.	Orono	Johnson, Lamont	E. Sullivan
Cushman, C. E.	So. Andover	Jones, C. L.	Corinna
Davis, H. W.	Oxford	Jones, L. H.	Carmel
Davis, W. A.	Garland	Katen, John M.	Dexter
Deering, A. M.	E. Denmark	Kendall, Nathan G.	Orrington
Dillingham, Charles A.	Bangor	Knight, C. V.	Turner Ctr.
Dillingham, Rowena W.	Bangor	Knowles, Elwell P.	Dexter
Eastman, A. A.	Dexter	Knowles, George H.	Dexter
Farnham, H. E.	Bangor	Knowles, Mrs. W. H.	Bangor

Leland, F. W.	Sangerville
Lewis, H. A.	Springfield
Lord, Erving	Fairfield
Mayo, R. H.	Bradley
Miller, Hellen E.	Holden
Miller, Julia P.	Holden
Millett, C. R.	W. Minot
Mitchell, Rives	Bangor
Page, H. L.	Eddington
Page, Mrs. H. L.	Eddington
Page, Pitt M.	Drew
Perry, Bertram C.	Milbridge
Pollard, J. F.	Benton
Potter, B. H.	Old Town
Potter, Frank A.	Wytopitlock
Reed, Albert W.	Benton Falls
Rich, Edmund V.	Charleston
Rich, Payson	Charleston
Robertson, Irvin O.	Pittsfield
Rooney, Daniel, Jr.	Brewer
Rooney, Mrs. Daniel	Brewer
Sawyer, H. Stanton	Garland
Shackley, James A.	W. Old Town
Shaw, H. Lowell	Buckfield
Sibley, D. H.	Stillwater
Sibley, Herman	Stillwater
Sibley, J. H.	Stillwater
Small, B. R.	Litchfield
Smith, Joseph	Bangor
Spearen, Manly H.	Orono
Stevens, J. C.	Chesterville
Stevens, Mrs. J. C.	Chesterville
Stevens, Miss	Chesterville
Sturtevant, H. W.	Milo
Sweet, Willard A.	E. Holden
Sweetser, F. R.	Cumberland Ctr.
Talbot, J. R.	E. Machias
Talbot, R. Elwin	Cumberland Ctr.
Towle, A. H.	Veazie
Towne, H. E.	E. Dover
Towne, H. S.	E. Dover
Varney, H. E.	Cumberland Ctr.
Washburn, C. C.	Minot
Wescott, C. W.	Patten
White, E. L.	Bowdoinham
White, Irving E.	Brewer
Willey, F. F.	Cumberland Ctr.
Wilson, Herbert L.	Bangor
Wiswell, Millard H.	E. Machias
York, C. A.	Bangor

INDEX

	PAGE
Absence from examinations,...	34
Administration, officers of,.....	9
Admission, ...	43
by certificate, ...	44
by examination, ...	44
general requirements, ...	43
local examinations for, ...	44
of college graduates, ...	43
of special students, ...	43
preliminary examinations for, ...	44
requirements for	45
to advance standing, ...	43
to College of Law,.....	158
to special and extension courses, ...	43
Agricultural chemistry, ...	57
Agricultural Experiment Station, ...	164
building, ...	21
Council, ...	6
equipment, ...	166
faculty, ...	164
investigations, ...	166
object, ...	165
publications, ...	167
Agriculture, College of, ...	126
building, ...	23
correspondence courses, ...	135
demonstration work, ...	135
extension courses, ...	134
faculty, ...	126
school course, ...	132
special courses, ...	132
teachers' course, ...	130
winter courses, ...	133
Agronomy, ...	53
course, ...	128
Alpha Zeta, ...	30
Alternating currents, ...	76
Alumni associations, ...	7
Alumni hall, ...	20
Animal Industry, ...	56
course, ...	128
Appointments, ...	173
Art, ...	89
museum, ...	29
Arts and Sciences, College of,.	116
degrees, ...	119
departments, ...	118
faculty, ...	116

PAGE

Associations, ... 29
Astronomy, ... 96
Athletic field, ... 25
Bacteriology, ... 59
Battalion, ... 105
Bibliography, ... 57
Biological chemistry, ... 57
Biology, ... 58
Board, ... 39
Bond, ... 40
Botany, ... 61
Buildings and equipment, ... 19
Bulletins of the experiment station, ... 167
Business Law, ... 73
Calendar, ... 3
Catalog, annual, ... 31
Central heating plant, ... 23
Certificate, admission by, ... 44
Certificate board, ... 44
Certificates in agriculture,..... 133
Chemical course, ... 141
Chemical Engineering course,.. 142
Chemistry, ... 64
organic, ... 64
Civil Engineering, ... 67
course, ... 144
Civics, ... 67
Classical course, ... 119
Coburn Hall, ... 19

PAGE

Commencement, exercises of 1907, ... 169
list of speakers, 1907..... 173
parts, ... 36
Committees of the faculty,.... 15
Correspondence courses, ... 135
Courses of Study:
Agricultural, ... 127
Agronomy, ... 128
Animal Industry, ... 128
Chemical, ... 141
Civil Engineering, ... 144
Classical, ... 119
Electrical Engineering, ... 150
Forestry, ... 136
Horticultural, ... 128
Law, ... 160
Mechanical Engineering, .. 147
Pharmacy, ... 152
Scientific, ... 119
Short Pharmacy, ... 155
Special, ... 43
Dairy building, ... 22
Dairying, ... 56
winter course, ... 133
Declamations, ... 79
sophomore prize, ...42, 79
Degrees, ... 36
advanced, ... 37
Degrees conferred, 1907..... 168

	PAGE
Departments of instruction, ...	53
Deposit, ...	40
Dormitories, ...	40
Dramatic Club, ...	30
Drawing, ...	102
Drill, hall, ...	33
military, ...32, 104	
Economics, ...	72
Education, ...73, 123	
Electrical engineering, ...	75
course, ...	150
Endowment of the University,.	18
English, ...	78
literature, ...	80
Entomology, ...	59
Entrance, dates of examinations, ...	44
examinations, ...	44
requirements, ...	45
Essays, ...	79
Establishment of the University, ...	17
Examinations, arrearage, ...	35
entrance, ...	44
rules, with regard to,.....	35
Excuses, ...	34
Expenses of students,...38, 122,159	
Faculty, University, ...	9
Agriculture, ...	126
Arts and Sciences,.....	116
Faculty, Classification, ...	200
Experiment Station, ...	164
Law, ...	157
Pharmacy, ...	152
Summer term, ...	120
Technology, ...	139
Farm Buildings, ...	23
Fees, laboratory, ...	39
Fernald Hall, ...	19
Forestry, ...	83
course, ...	136
Fraternity houses, ...	24
French, ...	110
Geological collection, ...	27
German, ...	85
Gothic, ...	86
Graduation, requirements for,..	114
Greek, ...	87
preparatory courses, ...	89
religion, ...	88
sculpture, ...	88
Gymnasium, ...	37
Herbarium, ...	28
Histology, animal, ...	60
plant, ...	61
History, ...	89
Holmes Hall, ...	21
Honorary society, ...	30
Honors, ...	35
conferred, 1907, ...	173

	PAGE
Horticultural, building,	22
course,	128
Horticulture,	91, 128
special course in,	132
Hydraulics,	69
Income of the University,	18
Infirmary,	25
International law,	73
Italian,	112
Junior exhibition,	41
speakers, 1907,	173
Kidder scholarship,	41
Kittredge loan fund,	41
Laboratory charges,	39
Landscape Gardening,	92
Latin,	92
Law, College of,	157
admission,	158
advisory board,	5
courses,	160
degrees,	159
expenses,	159
faculty,	157
methods of instruction,	159
Least squares,	110
Lectures, summer term,	121
Library,	21, 25, 121
Literati,	30
Loans,	40
Logic,	107
Lord Hall,	20
Lumbering,	84
Machine Design,	100
Maine Bulletins,	31
Major instructors,	118
Materia Medica,	106
Mathematics,	96
Mechanical engineering,	98
course,	147
Mechanics,	103
Mechanics and Drawing,	102
Medicine, preparation for,	119
Methodology,	74
Military, drill,	32, 104
instruction,	32
science, courses in,	104
science, requirements in,	32
uniform,	32
Mt. Vernon House,	25
Museum,	26
New Testament Greek,	88
Oak Hall,	19
Observatory,	20, 121
Optics,	109
Organization of the University,	114
Organizations,	29
Pedagogy,	73
Pharmacy, college of,	152

PAGE

Pharmacy course, ... 106
faculty, ... 152
short course, ... 155
Phi Kappa Phi,..... 30
members, ... 173
Philosophy, ... 107
Physical training, ... 33
Physics, ... 108
Physiology, ... 59
Political Economy, ... 72
Power House, ...22
Prescriptions, ... 107
Prizes, ... 41
awarded, 1907, ... 172
Psychology, ... 107
Publications, ... 31
Reading room, ... 26
Regulations of the University, 34
Reports, of the Experiment Station, ...31, 167
of standing, ... 35
of the University,..... 31
Requirements, for admission,.. 45
for graduation, ... 114
Rhetoric, ... 79
Romance Languages, ... 110
Roman Epigraphy, ... 94
Roman Philosophy, ... 93
Rooms, ...40, 122
Sanskrit, ... 95

PAGE

Scholarship honors, ... 35
Scholarships, ... 41
School course in Agriculture,.. 132
Scientific courses, ...119
Silviculture, ... 83
Short courses, ... 132
Societies, ... 29
Sociology, ... 72
Sophomore prize declamations, 42, 90
speakers, 1907, ... 173
Spanish, ... 112
Special courses, ... 132
Special students, ... 43
Students, catalog of, ... 175
classification of, ... 200
number of, ... 200
standing of, ... 35
Studies, quota of, ... 34
Structures, ... 71
Summer term, ... 120
expenses, ... 122
Surveying, ... 67
Technology, college of,..... 139
faculty, ... 139
Text-books, ... 39
Theology, preparation for,..... 119
Treasurer, ... 5
Trustees, board of,..... 5
executive committee of,... 5

PAGE

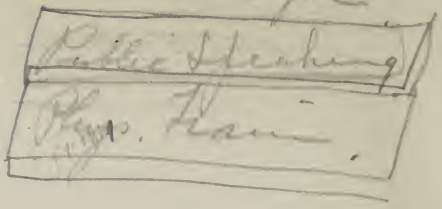
Trustees, meetings of, ... 3, 4
Tuition, charges, ... 39
loans, ... 40
University, charter, ... 17
bulletins, ... 31
buildings and equipment,.. 19
circulars, ... 31
endowment, ... 18
establishment, ... 17
location, ... 18
object, ... 17

PAGE

University, organizations, ... 114
studies, ... 21
Veterinary Science, ... 60
Wingate Hall, ... 19
Winter courses, ... 133
Woodwork, ... 99
Women, admission of,..... 43
Worship, public, ...34, 121
Young Men's Christian Association, ...30, 34
Zoology, ... 59

Auction
2:6 – Ch/6

Arrange



Island Home.

$115\frac{1}{2}$

THE MAINE BULLETIN

VOL. XI OCTOBER, 1908 NO. 2

CATALOG

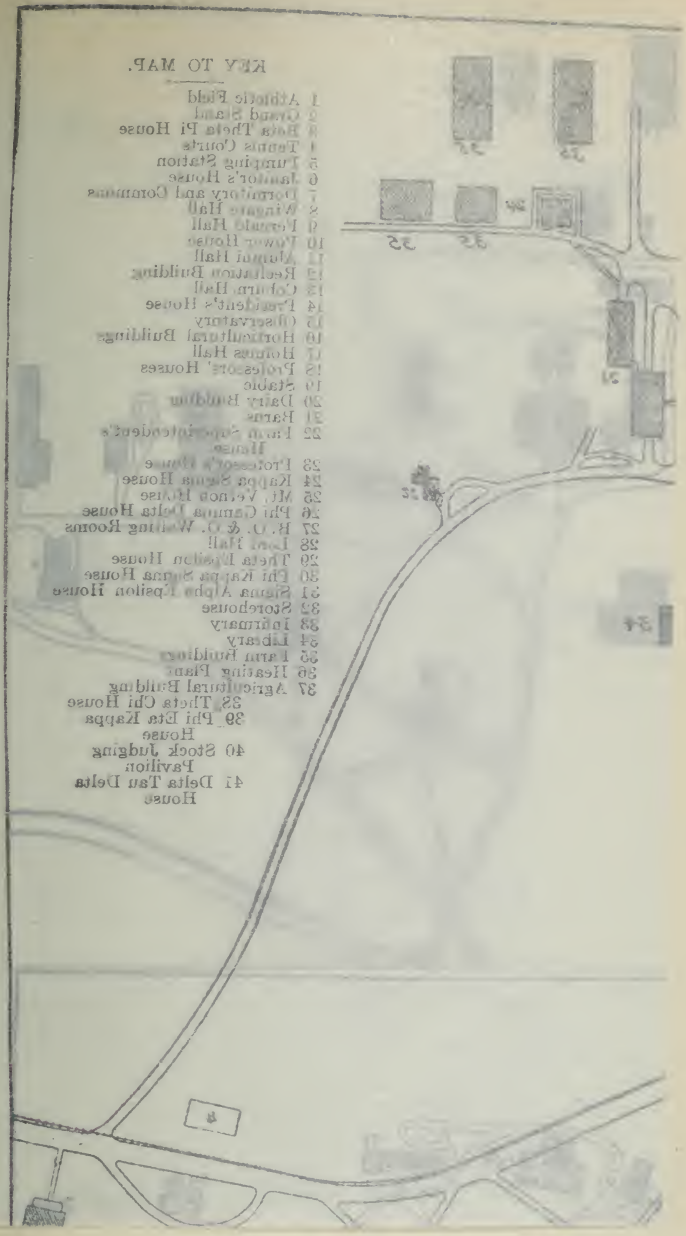
OF

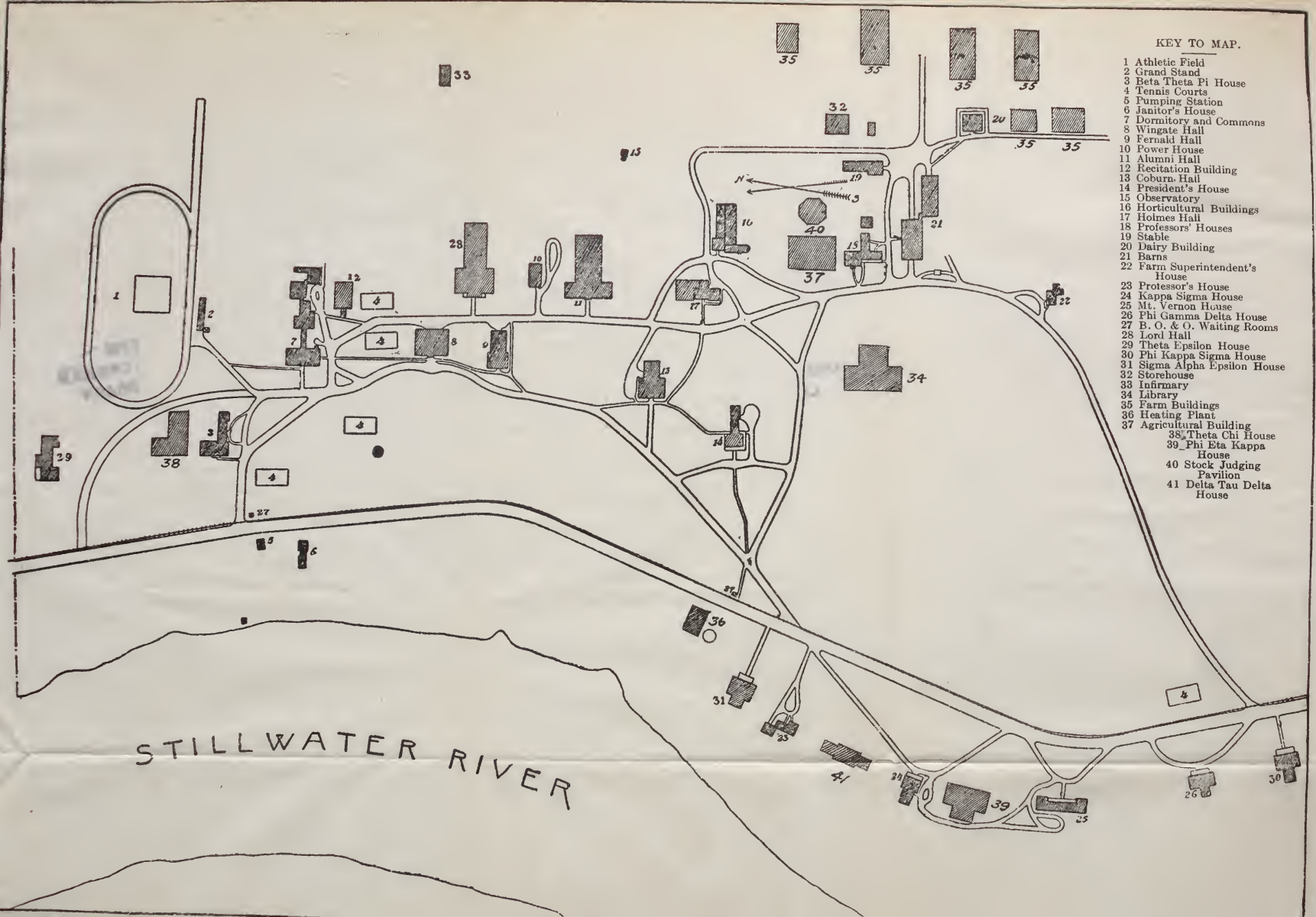
THE UNIVERSITY OF MAINE

1908-1909

Published Monthly by the University

Entered at the Post Office at Orono, Maine, as second-class matter


KEY TO MAP.
1 Athletic Field
2 Crowd Stand
3 Beta Theta Pi House
4 Tennis Courts
5 Pumping Station
6 Janitor's House
7 Dormitory and Commons
8 Wingate Hall
9 Pownall Hall
10 Power House
11 Alumni Hall
12 Recitation Building
13 Coburn Hall
14 President's House
15 Observatory
16 Horticultural Buildings
17 Holmes Hall
18 Professors' Houses
19 Stable
20 Dairy Building
21 Barns
22 Farm Superintendent's House
23 Professor's House
24 Kappa Sigma House
25 Mt. Vernon House
26 Phi Gamma Delta House
27 B. O. & O. Waiting Rooms
28 Low Hall
29 Theta Upsilon House
30 Phi Kappa Sigma House
31 Sigma Alpha Epsilon House
32 Storehouse
33 Infirmary
34 Library
35 Farm Buildings
36 Hearing Place
37 Agricultural Building
38 Theta Chi House
39 Phi Beta Kappa House
40 Stock Judging Pavilion
41 Delta Tau Delta House


KEY TO MAP.
1 Athletic Field
2 Grand Stand
3 Beta Theta Pi House
4 Tennis Courts
5 Pumping Station
6 Janitor's House
7 Dormitory and Commons
8 Wingate Hall
9 Fernald Hall
10 Power House
11 Alumni Hall
12 Recitation Building
13 Coburn Hall
14 President's House
15 Observatory
16 Horticultural Buildings
17 Holmes Hall
18 Professors' Houses
19 Stable
20 Dairy Building
21 Barns
22 Farm Superintendent's House
23 Professor's House
24 Kappa Sigma House
25 Mt. Vernon House
26 Phi Gamma Delta House
27 B. O. & O. Waiting Rooms
28 Lord Hall
29 Theta Epsilon House
30 Phi Kappa Sigma House
31 Sigma Alpha Epsilon House
32 Storehouse
33 Infirmary
34 Library
35 Farm Buildings
36 Heating Plant
37 Agricultural Building
38 Theta Chi House
39 Phi Eta Kappa House
40 Stock Judging Pavilion
41 Delta Tau Delta House
STILLWATER RIVER

CATALOG OF THE

UNIVERSITY OF MAINE

1908-1909

ORONO, MAINE

WATERVILLE
SENTINEL PUBLISHING COMPANY
1908

1908 1909 1909 1910

JULY

S	M	T	W	T	F	S
.	.	.	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	.
.	.	.	.	.	.	.

AUGUST

S	M	T	W	T	F	S
.	.	.	.	.	.	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	.	.	.	.	.

SEPTEMBER

S	M	T	W	T	F	S
.	.	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	.	.	.

OCTOBER

S	M	T	W	T	F	S
.	.	.	.	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
.	.	.	.	.	.	.

NOVEMBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	.	.	.	.	.
.	.	.	.	.	.	.

DECEMBER

S	M	T	W	T	F	S
.	.	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	.	.

JANUARY

S	M	T	W	T	F	S
.	.	.	.	.	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	.	.	.	.	.	.

FEBRUARY

S	M	T	W	T	F	S
.	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	.	.	.	.	.	.
.	.	.	.	.	.	.

MARCH

S	M	T	W	T	F	S
.	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	.	.	.

APRIL

S	M	T	W	T	F	S
.	.	.	.	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	.
.	.	.	.	.	.	.

MAY

S	M	T	W	T	F	S
.	.	.	.	.	.	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	.	.	.	.	.

JUNE

S	M	T	W	T	F	S
.	.	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	.	.	.

JULY

S	M	T	W	T	F	S
.	.	.	1	2	3	.
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
.	.	.	.	.	.	.

AUGUST

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	.	.	.	.
.	.	.	.	.	.	.

SEPTEMBER

S	M	T	W	T	F	S
.	.	.	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	.	.

OCTOBER

S	M	T	W	T	F	S
.	.	.	.	.	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	.	.	.	.	.	.

NOVEMBER

S	M	T	W	T	F	S
.	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	.	.	.	.
.	.	.	.	.	.	.

DECEMBER

S	M	T	W	T	F	S
.	.	.	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	.

JANUARY

S	M	T	W	T	F	S
.	.	.	.	.	.	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	.	.	.	.	.

FEBRUARY

S	M	T	W	T	F	S
.	.	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	.	.	.	.	.
.	.	.	.	.	.	.

MARCH

S	M	T	W	T	F	S
.	.	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	.	.

APRIL

S	M	T	W	T	F	S
.	.	.	.	.	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
.	.	.	.	.	.	.

MAY

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	.	.	.	.
.	.	.	.	.	.	.

JUNE

S	M	T	W	T	F	S
.	.	.	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	.	.

CALENDAR

FALL SEMESTER, 1908

September 14, Monday,	Arrearage examinations begin
September 14, Monday,	Entrance examinations begin.
September 16, Wednesday,	Registration begins, 1.30 P. M.
September 17, Thursday,	Fall semester begins.
November 24, Tuesday,	Meeting of the Board of Trustees.
November 25, Wednesday,	Thanksgiving recess begins, 5.30 P. M.
November 30, Monday,	Thanksgiving recess ends, 12 M.
December 4, Friday,	Sophomore prize declamations.
December 22, Tuesday,	Christmas recess begins, 5.30 P. M.

1909

January 2, Saturday,	Christmas recess ends, 7.45 A. M.
January 29, Friday,	Fall semester ends

SPRING SEMESTER, 1909

January 30, Saturday,	Registration.
February 1, Monday,	Spring semester begins.
February 22, Monday,	Washington's birthday, a holiday.
March 29, Monday,	Spring recess begins, 7.45 A. M.
April 5, Monday	Spring recess ends, 7.45 A. M.
April	Patriot's day, a holiday.
May 19, 12 M.-22,	Junior week.
May 30 Sunday,	Memorial day, a holiday.
June 2-5	Entrance examinations.
June 2, Wednesday,	8.00 A. M. Algebra.
	Elementary Algebra (Short Pharmacy).
	10.00 A. M. Chemistry.
	Botany.
	1.30 P. M. Latin.
	4.30 P. M. Roman History.
June 3, Thursday,	8.00 A. M. Arithmetic (Short Pharmacy).
	Solid Geometry.
	10.00 A. M. French.
	German.
	Geography (Short Pharmacy).
	1.30 P. M. English.
	English Grammar (Short Pharmacy).
	4.30 P. M. English History.

June	4, Friday,	8.00 A. M. American History and Civil Government.
		American History (Short Pharmacy).
		Trigonometry.
		10.00 A. M. Plane Geometry.
		1.30 P. M. Physics.
June	5, Saturday,	8.00 A. M. Greek.
		Physiology.
		10.00 A. M. Greek History.
		1.30 P. M. Physiography.
June	6, Sunday,	Baccalaureate address.
June	7, Monday,	Convocation.
June	7, Monday,	Class day.
June	7, Monday,	Reception by the President.
June	8, Tuesday,	Meeting of the Board of Trustees.
June	8, Tuesday,	Receptions by the fraternities.
June	8, Tuesday,	Alumni luncheon ; alumnae luncheon.
June	8, Tuesday,	Address before the Phi Kappa Phi Society.
June	9, Wednesday,	COMMENCEMENT.
June	9, Wednesday,	Commencement dinner.
June	9, Wednesday,	Meeting of the Alumni Association.
June	9, Wednesday,	Commencement concert.
June	28, Monday,	Summer term begins.
August	6, Friday,	Summer term ends.

FALL SEMESTER, 1909

September	10-14 inclusive,	Arrearage examinations.
September	10-14 inclusive,	Entrance examinations.
	The order of examinations is the same as that for June.	
September	15, Wednesday,	Registration begins, 1.30 P. M.
September	16, Thursday,	Fall semester begins, 1.30 P. M.
November	23, Tuesday,	Meeting of the Board of Trustees.
November	24, Wednesday,	Thanksgiving recess begins, 5.30 P. M
November	29, Monday,	Thanksgiving recess ends, 12 M.
December	3, Friday,	Sophomore prize declamations.
December	22, Wednesday,	Christmas recess begins, 5.30 P. M.

1910

January	2, Sunday	Christmas recess ends, 7.45 A. M.
January	28, Friday,	Fall semester ends.

SPRING SEMESTER, 1910

January	29, Saturday,	Registration.
January	31, Monday,	Spring semester begins.
June	8, Wednesday,	COMMENCEMENT.

CALENDAR OF THE COLLEGE OF LAW

1908

October 7, Wednesday, Fall term begins.
December 23, Wednesday, Fall term ends.

1909

January 6, Wednesday, Winter term begins.
March 17, Wednesday, Winter term ends.
March 24, Wednesday, Spring term begins.
June 9, Wednesday, COMMENCEMENT.
October 6, Wednesday, Fall term begins.
December 22, Wednesday, Fall term ends.

1910.

January 5, Wednesday, Winter term begins.
March 16, Wednesday, Winter term ends.
March 23, Wednesday, Spring term begins.
June 8, Wednesday, COMMENCEMENT.

THE BOARD OF TRUSTEES

Hon. EDWARD BRACKETT WINSLOW, President Term Expires April 13, 1912	Portland
SAMUEL WADSWORTH GOULD, B. S., Clerk Term expires April 16, 1914	Skowhegan
Hon. CHARLES LESTER JONES Term expires April 17, 1910	Corinna
Hon. JOHN ALFRED ROBERTS, M. A. Term expires May 31, 1911	Norway
Hon. WILLIAM THOMAS HAINES, LL. B., LL. D. Term expires April 24, 1913	Waterville
Hon. SUMNER PETER MILLS Term expires September 10, 1914	Stonington
EDWIN JAMES HASKELL, B. S. Term expires December 31, 1914	Westbrook
JOHN MARSHALL OAK, B. S. Term expires April 2, 1915	Bangor

EXECUTIVE COMMITTEE

Trustees WINSLOW, GOULD, and HAINES

TREASURER

Hon. ISAIAH KIDDER STETSON, Ph. B. — Bangor

ADVISORY BOARD FOR THE COLLEGE OF LAW

Gen. CHARLES HAMLIN, M. A., President	Bangor
Hon. HENRY BRADSTREET CLEAVES	Portland
Justice ALBERT MOORE SPEAR	Gardiner
Hon. WILLIAM THOMAS HAINES, LL. D.	Waterville
Hon. HERBERT MILTON HEATH, M. A.	Augusta
Chief Justice LUCILIUS ALONZO EMERY, LL. D.	Ellsworth
Dean WILLIAM EMANUEL WALZ, M. A., LL. B., Secretary	Bangor

THE EXPERIMENT STATION COUNCIL

PRESIDENT GEORGE EMORY FELLOWS, PH. D., LL. D.	*President*
DIRECTOR CHARLES DAYTON WOODS, Sc. D.	*Secretary*
JOHN ALFRED ROBERTS, M. A., Norway	*Committee of Board of Trustees*
CHARLES LESTER JONES, Corinna	
SAMUEL WADSWORTH GOULD, B. S., Skowhegan	
AUGUSTUS WILLIAM GILMAN, Foxcroft	*Commissioner of Agriculture*
EUGENE HARVEY LIBBY, Auburn	*State Grange*
CHARLES S. POPE, Manchester	*State Pomological Society*
RUTILLUS ALDEN, Winthrop	*State Dairymen's Association*
JAMES MONROE BARTLETT, M. S.	*Members of the Station Staff*
FREMONT LINCOLN RUSSELL, V. S.	
EDITH MARION PATCH, B. S.	
WARNER JACKSON MORSE, M. S.	
RAYMOND PEARL, PH. D.	
HERMAN HERBERT HANSON, M. S.	
FRANK MACY SURFACE, PH. D.	
CHARLES EDWARD LEWIS, PH. D.	

ALUMNI ASSOCIATIONS

THE GENERAL ASSOCIATION

President, J. M. Oak, '73, Bangor
Secretary, F. L. Russell, '85, Orono
Corresponding Secretary, R. K. Jones, '86, Orono
Treasurer, A. H. Brown, '90, Oldtown
Necrologist, J. N. Hart, '85, Orono
Alumni Members of the Athletic Association, G. E. Thompson, '91 Orono, E. H. Kelley, '90, Bangor, A. L. Bird, '00, Rockland

The West Maine Association

President, A. C. Wescott, 99, 7 Exchange St., Portland
Secretary and Treasurer, S. E. Patrick, '03, Gorham

The Boston Association

President, W. N. Cargill, '00, 333 Union St., Lynn, Mass.
Vice-President, W. B. Pierce, '90, Boston, Mass.
Secretary, E. R. Berry, '04, 107 Cross St., Malden, Mass.
Executive Committee, L. C. Southard, '75, E. O. Goodridge, '85, G. T. Stewart, '04

The New York Association

President, Allen Rogers, '97, 764 De Kalb Ave., Brooklyn, N. Y.
Vice-President, M. B. Downing, '99, 55 Franklin St., New York City
Treasurer, A. W. Stephens, '99, 75 Littleton Ave., Newark, N. J.
Secretary, Ralph Hamlin, '98, 399 Sixth Ave., Brooklyn, N. Y.

The Washington (D. C.) Association

President, P. L. Ricker, '00, U. S. Dept. Ag.
Secretary and Treasurer, H. P. Gould, '93, U. S. Dept. Ag.

The Penobscot Valley Association

President, W. B. Pierce, '90, Bangor
Secretary and Treasurer, J. H. McClure, '05, Bangor
Executive Committee, V. K. Gould, '97, H. B. Buck, '93, H. S. Boardman, '95

The Western Association

President, O. C. Farrington, '81, Field Museum, Chicago, Ills.
First Vice-President, C. C. Whittier, '99, 1121 The Rookery, Chicago, Ills.
Secretary and Treasurer, J. K. Goodrich, '07, 847 S. Lawnsdale Ave., Chicago, Ills.

The Pittsburg Association

President, W. T. Brastow, '97, Ambridge, Pa.
Vice-President, B. F. Faunce, '01, Pittsburg, Pa.
Secretary and Treasurer, H. E. Cole, '02, 1023 Park Building, Pittsburg, Pa.
Executive Committee, J. W. Brown, '99, Chairman, Williamsburg, Pa.

The Schenectady Association

President, J. G. Lurvey, '00, 1206 State St.
Vice-President, C. N. Rackliffe, '02, 1206, State St.
Secretary, H. E. Duren, '02, 306 Lafayette St.
Treasurer, H. F. Hoxie, '99, 940 State St.
Executive Committee, C. W. Bartlett, '01, H. P. Mayo, '99, H. E. Duren, '02

The Kennebec Valley Association

President, Harold E. Cook, '00, Waterville
Secretary, Ernest C. Butler, '01, Skowhegan
Treasurer, Samuel J. Foster, '03, Oakland
Executive Committee, J. H. Burleigh, '87, E. C. Butler, '01, H. E. Cook, '00
Legislative Committee, W. R. Pattangall, '97, E. F. Danforth, '92, J. E. Nelson, '04

The College of Law Alumni Association

President, F. D. Fenderson, '99, Limerick
Vice-President, Freeland Jones, '00, Bangor
Corresponding Secretary, G. H. Worster, '05, Bangor
Financial Secretary, N. V. MacLean, '05, Bangor
Treasurer, B. W. Blanchard, '04, Bangor

OFFICERS OF ADMINISTRATION

GEORGE EMORY FELLOWS, President
JAMES NORRIS HART, Dean of the University
JAMES STACY STEVENS, Dean of the College of Arts and Sciences
WILLIAM DANIEL HURD, Dean of the College of Agriculture
WILLIAM EMANUEL WALZ, Dean of the College of Law
CHARLES DAYTON WOODS, Director of the Experiment Station
GILMAN ARTHUR DREW, Director of the Museum
ELIZABETH ABBOTT BALENTINE, Secretary of the Faculty

*THE FACULTY OF INSTRUCTION AND INVESTIGATION

GEORGE EMORY FELLOWS, Ph. D., L. H. D. LL. D. Campus
President
Professor of History

MERRITT CALDWELL FERNALD, Ph. D., LL. D. 54 Main Street
Emeritus Professor of Philosophy

ALFRED BELLAMY AUBERT, M. S. 72 Main Street
Professor of Chemistry

JAMES MONROE BARTLETT, M. S. College Street
Chemist in the Experiment Station

LUCIUS HERBERT MERRILL, Sc. D. 14 Bennoch Street
Professor of Biological and Agricultural Chemistry

JAMES NORRIS HART, C. E., M. S., Sc. D. College Street
Professor of Mathematics and Astronomy
Dean of the University

FREMONT LINCOLN RUSSELL, B. S., V. S. 70 North Main Street
Professor of Bacteriology and Veterinary Science and Assistant Biologist in the Experiment Station

HORACE MELVYN ESTABROOKE, M. A. 80 Main Street
Professor of English

*Arranged in groups in order of seniority of appointment.

JAMES STACY STEVENS, M. S., LL. D. 99 Main Street
Professor of Physics
DEAN OF THE COLLEGE OF ARTS AND SCIENCES
CHARLES DAYTON WOODS, Sc. D. 55 Main Street
DIRECTOR OF THE EXPERIMENT STATION
JOHN HOMER HUDDILSTON, PH. D. 105 Main Street
Professor of Greek
WILLIAM EMANUEL WALZ, M. A., LL. B. 183 Cedar St., Bangor
Professor of Law
DEAN OF THE COLLEGE OF LAW
GILMAN ARTHUR DREW, PH. D. College Street
Professor of Biology
DIRECTOR OF THE MUSEUM
WILBUR FISK JACKMAN, B. S., PH. C. 38 Pine Street
Professor of Pharmacy
RALPH KNEELAND JONES, B. S. 26 Bennoch Street
Librarian
WILLIAM DANIEL HURD, M. AGR. Campus
Professor of Agronomy
DEAN OF THE COLLEGE OF AGRICULTURE
JACOB BERNARD SEGALL, PH. D., 61 Mill Street
Professor of Romance Languages
HAROLD SHERBURNE BOARDMAN, C. E. 76 Main Street
Professor of Civil Engineering
GEORGE DAVIS CHASE, PH. D. 59 Main Street
Professor of Latin
GORDON EDWIN TOWER, B. S., M. F. Forest Street
Professor of Forestry
CAROLINE COLVIN, PH. D. Campus
Professor of History
ARTHUR CRAWFORD JEWETT, B. S. 104 Main Street
Professor of Mechanical Engineering
WALTER KIERSTEAD CANONG, B. Sc. 72 Main Street
Professor of Electrical Engineering
CHARLES DAVIDSON, PH. D. 299 State Street, Bangor
Professor of Education
JOSEPH WILLIAM CARR, PH. D. 100 Main Street
Professor of Germanic Languages
WARNER JACKSON MORSE, M. S. 76 North Main Street
Vegetable Pathologist in the Experiment Station

ROBERT JAMES SPRAGUE, PH. D. 435 Union Street, Bangor
Professor of Economics and Sociology

WALTER STEVENS BROWN, Captain 25th U. S. Infantry Campus
Professor of Military Science and Tactics

EDITH MARION PATCH, B. S. College Street
Entomologist in the Experiment Station

CHARLES PARTRIDGE WESTON, C. E., M. A. College Street
Professor of Mechanics and Drawing

RAYMOND PEARL, PH. D. Forest Street
Biologist in the Experiment Station

PERCY ANDERSON CAMPBELL, M. S. A. Campus
Professor of Animal Industry

CHARLES BARTO BROWN, C. E. 53 Main Street
Professor of Railroad Engineering

WALLACE CRAIG, PH. D. College Street
Professor of Philosophy

FRANK MACY SURFACE, PH. D. Juniper Street
Associate Biologist in the Experiment Station

MINTIN ASBURY CHRYSLER, PH. D. 78 North Main Street
Associate Professor of Botany

HERMAN HERBERT HANSON, M. S. Forest Street
Associate Chemist in the Experiment Station

CHARLES EDWARD LEWIS, PH. D. 78 North Main Street
Associate Vegetable Pathologist in the Experiment Station

EDGAR MYRICK SIMPSON, B. A. 31 Highland Avenue, Bangor
Assistant Professor of Law

GUY ANDREW THOMPSON, M. A. College Street
Assistant Professor of English

ANDREW PAUL RAGGIO, PH. D. Oak Street
Assistant Professor of Romance Languages

JAMES EARL McCLINTOCK, B. S. 22 Mill Street
Assistant Professor of Agronomy
IN CHARGE OF AGRICULTURAL EXTENSION WORK

WALTER MOLBRAY CURTIS, S. B. 51 Main Street
Assistant Professor of Mechanical Engineering

HARLEY RICHARD WILLARD, M. A. 40 Main Street
Assistant Professor of Mathematics

EARNEST DAVID WAID, B. Sc. 57 Main Street
Assistant Professor of Agronomy

LEON ELMER WOODMAN, M. A., 20 Mill Street
Assistant Professor of Physics

GUSTAV FREDERICK WITTIG, B. S., E. E. 78 North Main Street
Assistant Professor of Electrical Engineering
WINDSOR PRATT DAGGETT, PH. B. College Street
Assistant Professor of Public Speaking
VICTOR RAY GARDNER, M. S. A. 7 Main Street
Assistant Professor of Horticulture
WILLIAM ARCHIBALD BROWN, B. S. A. College Street
Assistant Professor of Animal Industry

LAURIE LORENZO BURGESS, M. S. Mill Street
Instructor in Chemistry (Summer Term)
ARTHUR JOHNSON EAMES, B. A. College Street
Instructor in Botany (Summer Term)
ARCHER LEWIS GROVER, B. S. 40 Main Street
Instructor in Drawing
GEORGE HENRY WORSTER, LL. M. 234 Center Street, Bangor
Instructor in Sales and Private Corporations
BARTLETT BROOKS, B. A., LL. B. 10 Columbia Building, Bangor
Instructor in Contracts and Negotiable Paper
EVERETT WILLARD DAVEE 50 Mill Street
Instructor in Wood and Iron Work
WALTER EVERETT PRINCE, M. A. 26 Main Street
Instructor in English
ELMER EARL MOOTS, B. C. E., M. S. Stillwater
Instructor in Mathematics
CHARLES JENKINS CARTER 6 Pine Street
Instructor in the Machine Shop
JOANNA CARVER COLCORD, B. S. College Street
Assistant Chemist in the Experiment Station
PAUL LEONARD BEAN, B. S. 28 North Main Street
Instructor in Civil Engineering
ROBERT EDMUND CLAYTON, B. S. 105 Forest Avenue, Bangor
Instructor in Chemistry
GLADYS ETHEL FELLOWS, B. A. Campus
Instructor in Romance Languages
LESLIE INGALLS JOHNSTONE, B. S., Milford
Instructor in Civil Engineering
JAMES SEYMOUR, PH. C., B. S. Stillwater
Instructor in Chemistry

HENRY LEWIS SWEET, B. A. — 51 Main Street
Instructor in Mathematics

WILLIS FLYE WASHBURN, B. S. — 6 Pine Street
Instructor in Chemistry

LOWELL JACOB REED, B. S. — College Street
Instructor in Mathematics

GEORGE EDWARD PEARSON, M. A. — 61 Main Street
Instructor in English

HARRY NEWTON CONSER, M. S., M. A. — 24 Main Street
Instructor in Botany

MAYNE ROSE CURTIS, M. A. — College Street
Assistant Biologist in the Experiment Station

EDITH MAYNARD WALLACE, M. A. — 59 Mill Street
Instructor in Biology

REX CARLETON GELLERSON, B. S. — Campus
Inspector in the Experiment Station

JOHN FRANCIS MAHAN — Bangor
Physical Director

JAMES PITT FARNSWORTH, B. S. — College Street
Tutor in Drawing

ROBERT KENT STEWARD, B. S. — Middle Street, Old Town
Tutor in Civil Engineering

JOSEPH LEWIS COON, PH. B. — 61 Main Street
Tutor in Physics

EDWARD ALLEN GARLOCK, B. S. — 61 Main Street
Tutor in Physics

ANNE MARGARET MERRILL, B. A. — 14 Bennoch Street
Fellow in German

FOREST JOHN MARTIN, LL. B. — Kenduskeag Ave., Bangor
Resident Lecturer on Common Law Pleading and Maine Practice

HUGO CLARK, LL. M. — 5 Broadway, Bangor
Resident Lecturer on Equity Pleading and Practice

CHARLES HAMLIN, M. A. — 25 Fifth Street, Bangor
Lecturer on Bankruptcy and Federal Procedure

LUCILIUS ALONZO EMERY, M. A., LL. D. — Ellsworth
Lecturer on Roman and Probate Law

LOUIS CARVER SOUTHARD, M. S., LL. D. — Boston
Lecturer on Medico-Legal Relations

PAYSON SMITH, LL. D. — Auburn
Lecturer on Superintendence

KENNETH CHARLES MORTON SILLS, A. M. — Brunswick
Lecturer on Roman Literature

ASSISTANTS

STEPHEN JOHN FARRELL — Forest Street
Assistant in Physical Training

ISABEL MONRO, B. S. — 59 Mill Street
Cataloger in the Library

BERTHA COREY WHITTEMORE — College Street
Assistant in the Library

ALBERT GUY DURGIN, B. S. — 8 Middle Street
Assistant in Chemistry

OTHER OFFICERS

JAMES ADRIAN GANNETT, B. S. — 88 Main Street
Commercial Secretary

CYRUS SKILLINGS WINCH — 43 Elm Street, Bangor
Taxidermist in the Museum

ANDREW MAYHEW SHAW — College Street
Superintendent of Grounds and Greenhouses

CHARLES ANDERSON SMITH — Campus
Foreman of the Farm

HALSEY RICHARDSON WING — Campus
Head Janitor

GEORGE ABRAHAM COLBURN — Bennoch Street
Head Carpenter

GRACE MARY COLBURN — Bennoch Street
Cashier

OLA HELEN PERRIN — College Street
Stenographer to the President

ANNIE MARIE SNOW — 58 Main Street
Clerk and Stenographer to the Director of the Experiment Station

VIVIAN AUGUSTA PAGE — 21 Pine Street
Stenographer to the Deans and the Secretary

BLANCHE FOLSOM POOLER — Stillwater
Stenographer in the Experiment Station

LOTTIE ESTELLE McPHETERS — 7 Main Street
Computer in the Experiment Station

ALICE WOODS AVERILL — 51 Mill Street
Laboratory Assistant in the Experiment Station

NELLIE WILKINS LANE — Campus
Matron of the Mt. Vernon House

HENRY ATLEIGH MILLET — Campus
Meteorological Observer in the Experiment Station

WALTER ANDERSON — Campus
Poultryman in the Experiment Station

ROYDEN LINDSAY HAMMOND — 59 Main Street
Seed Analyst and Photographer in the Experiment Station

FRANK DELMONT STERRY — Campus
Laboratory Assistant in the Experiment Station

ALBERT WHITING DOOLITTLE — Campus
Poultryman in the College of Agriculture

HERBERT MORTON TUCKER — Campus
Herdsman

* STANDING COMMITTEES OF THE FACULTY

Admission to College

The President, the Deans (sub-committee), Professor Aubert, Professor Carr, Professor Chase, Professor Chrysler, Professor Colvin, Professor Drew, Professor Estabrooke, Professor Huddilston, Professor Jewett, Professor Merrill, Professor Segall, Professor Weston

Advanced Degrees

Professor Chase, Professor Chrysler, Professor Colvin, Professor Estabrooke, Professor Walz, Professor Weston

Approved Tutors

Professor Hart, Secretary Balentine

---

* The member whose name is printed first is the chairman of the committee.

Standing Committees

Athletics
Professor Jones, Professor Boardman

Bachelor's Degree
Professor Stevens, Professor Colvin, Professor Hurd, Professor Weston

Bulletins
Professor Jones

Catalog
Professor Stevens

Courses
Professor Hart, Professor Boardman, Professor Drew, Professor Stevens

Debate
Professor Estabrooke, Professor Colvin, Professor Daggett, Professor Sprague

Delinquent Students
Professor Boardman, Professor Daggett, Professor Ganong, Mr. Grover, Professor Willard

Entrance Examinations
Professor Stevens

Fitting Schools
Professor Estabrooke, Professor Carr, Professor Chase, Professor Davidson, Professor Hart (Secretary), Professor Huddilston, Professor Stevens, Professor Thompson

Health
Professor Russell, Professor Colvin, Professor Jackman

Honors
Professor Stevens, Professor Carr, Professor Huddilston

Library
Professor Jones, Professor Colvin, Professor Estabrooke, Professor Jackman

Military Work
Captain Brown, Professor Jewett, Professor McClintock

Press
Professor Thompson, Professor Carr, Professor Chase

Registration
Professor Stevens, Professor Drew, Professor Hart

Rules
Professor Hart, Professor Stevens, Director Woods

Student Advisers
For freshmen in all courses: Professor Hart
For all other students: the heads of the departments in which their major subjects are taken

Student Organizations Other Than Athletics
Professor Jones, Professor Daggett, Professor Wittig

Summer Term
Professor Stevens

Tuition Loans
President Fellows, Professor Estabrooke, Professor Hart

The University Council
Faculty Members: President Fellows, Professor Boardman, Professor Hart, Professor Stevens
Seniors: Mr. H. P. Higgins, Mr. F. D. Knight, Mr. H. A. White
Juniors: Mr. E. S. Berry, Mr. F. G. Wadsworth

THE UNIVERSITY OF MAINE

HISTORY

The University of Maine is an integral part of the public educational system of the state. It completes the work done in the high school, as the work in the high school completes that of the primary and grammar schools.

Through appropriations by the state and the United States it furnishes instruction in the Liberal Arts and Sciences, Agriculture, Engineering, Forestry, Pharmacy, and Law.

By an Act of Congress, approved July 2, 1862 by President Lincoln, it was provided that there should be granted to the states, from the public lands, "thirty thousand acres for each Senator and Representative in Congress," from the sale of which there should be established a perpetual fund, "the interest of which shall be inviolably appropriated by each state which may take and claim the benefit of this act, to the endowment, support, and maintenance of at least one college where *the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such manner as the legislatures of the states may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life.*" The act forbade the use of any portion of the principal or interest of this fund for the purchase, erection, or maintenance of buildings and required each state accepting the benefit of the provisions of the act "to provide within five years not less than one college" to carry out the purposes of the act.

Maine accepted this grant in 1863, and in 1865 constituted "a body politic and corporate, by the name of the Trustees of the State College of Agriculture and the Mechanic Arts." The trustees were authorized to receive and hold donations, to select the professors and other officers of the college, to establish the conditions for admission, to lay out courses of study, to grant degrees, and to exercise other usual powers and privileges.

The Governor and Council were given the right "to examine into the affairs of the college, and the doings of the trustees, and to inspect all their records and accounts, and the buildings and premises occupied by the college."

It was provided that, in addition to the studies especially required by the Act of Congress, the college should teach such other studies as its facilities would permit.

The Legislature of 1897 changed the name of the institution to "The University of Maine."

ENDOWMENT AND INCOME

The State of Maine received, under the Act of Congress above referred to, two hundred and ten thousand acres of public land, from which the University has realized an endowment fund of $118,300. This has been increased by a bequest of $100,000 from Abner Coburn of Skowhegan, who was for many years President of the Board of Trustees. The state pays to the University five per cent. on the fund realized from the public lands, and four per cent. on the Coburn Bequest. The town of Orono contributed $8,000, and the town of Oldtown $3,000, for the purchase of the site on which the buildings stand. The state has appropriated about $450,000 for the material equipment. The present value of the buildings and equipment belonging to the University, including gifts other than those made by the state, is estimated at $750,000.

Under an Act of Congress, approved March 2, 1887, the University receives $15,000 annually for the maintenance of the department known as the Agricultural Experiment Station.

Under an Act of Congress, approved August 30, 1890, the University receives $25,000 annually for its more complete endowment and maintenance.

Under an Act of Congress, approved March 17, 1906, the University received for the year 1906 $5,000, which is to be increased each year by $2,000, until it reaches $15,000 a year.

By an amendment to the Agricultural Appropriation Bill, approved March 4, 1907, the University received $5,000 in the year 1907, and receives an addition of a like amount each year until the sum reaches $25,000.

Under an Act of the Legislature, approved March 26, 1907, the University receives $65,000 a year for each of the years 1907 and 1908 for maintenance.

Student fees and miscellaneous receipts complete the income.

LOCATION

The University has a beautiful and healthful location in the town of Orono, Penobscot county, half way between the villages of Orono and Stillwater, three miles from the city of Oldtown, and nine miles from the city of Bangor. The Stillwater river, an arm of the Penobscot, flows in front of the buildings, forming the western boundary of the campus. Orono is upon the Maine Central Railroad and is easy of access from all parts of the state.

The cars of the Bangor Railway and Electric railroad run through the University grounds. Visitors may find it convenient to take the electric cars at Bangor, Veazie, or Oldtown, as the electric road does not run to the railroad station at Orono. Baggage may be sent to Orono by the Maine Central Railroad.

The College of Law is located in the Exchange Building, Bangor, at the corner of Exchange and State streets.

THE BUILDINGS AND THEIR EQUIPMENT

Oak Hall.—In the northern part of the campus is Oak Hall, a substantial four-story brick building used as a dormitory for men, named in honor of Lyndon Oak, of Garland, for many years a useful member of the board of trustees. It contains forty-nine rooms for students, and is furnished with bath rooms. It is heated by steam, supplied with water, and lighted by electricity.

Fernald Hall.—This building, named in honor of Merritt C. Fernald, LL. D., President of the University from 1879 to 1893, is a two-story brick building. It contains fifteen rooms devoted to the departments of chemistry and pharmacy. On the first floor are the quantitative and pharmaceutical laboratories, with offices and private laboratories for the professors of chemistry and pharmacy; upon the second floor are lecture rooms, the qualitative laboratory, the office and private laboratory of the instructor in qualitative analysis, a store room, and a recitation room. Under the roof are arranged the mineralogical laboratory, dark rooms, and a laboratory for freshman work. In the basement are an assay laboratory, a laboratory for water analysis, a room for organic preparations, and store rooms.

Coburn Hall.—Directly south of Fernald Hall is Coburn Hall, named in honor of Abner Coburn, of Skowhegan, the chief benefactor of the University. It is a brick building, three stories in height. In the basement are located a laboratory for animal and plant physiology, the taxidermist's laboratory, and the University Exchange. Connected with the basement is a small greenhouse for the use of the biological depart-

ment. On the first floor are four recitation rooms, and part of the museum. On the second floor are the botanical and zoölogical laboratories and lecture room and part of the museum. On the third floor are recitation rooms for the departments of economics, philosophy, and German, the psychological laboratory, and the remainder of the museum.

Wingate Hall.—One of the most conspicuous buildings on the campus, Wingate Hall, named in honor of William P. Wingate, of Bangor, long an honored member of the board of trustees, is a three-story brick structure, rectangular in form, with a clock tower. It was erected for the departments of civil and mechanical engineering, but is at present occupied chiefly by the departments of civil engineering, physics, and mechanics and drawing. On the ground floor are four recitation rooms, instrument rooms, an optical room, and the offices of the professors of civil engineering and mechanics and drawing. On the second floor are the offices and recitation rooms of the professors of physics, Greek, and Latin, two physical laboratories, and the physical apparatus rooms. On the third floor are two large, well lighted drawing rooms for the use of the departments of civil engineering and mechanics and drawing, and a filing room containing a collection of blue prints belonging to the department of civil engineering. In the basement are the electrical laboratory and the photometer room of the department of physics, and the cement testing laboratory. On the fourth floor is another photometer room for the use of students in physics.

Alumni Hall.—To the northeast of Coburn Hall stands Alumni Hall, erected in 1900. The front part contains on the ground floor the offices of the President, Secretary, and Cashier, a Board room, two recitation rooms for the use of the mathematical department, and the office of the Dean of the University; the second floor contains the university chapel with a large pipe organ in the choir gallery, and the drill hall and gymnasium with a running track in the gallery. Under the drill hall are the offices of the military instructor and the physical director, the baseball cage, lockers, lavatories, rooms for storage, etc. The dimensions of the drill hall and gymnasium are 100 x 62 feet. This room is encircled by a 9-foot running track suspended from the roof. As a gymnasium it is equipped with complete apparatus of the most approved kind.

The Observatory.—The astronomical observatory stands upon a slight elevation to the east of Alumni Hall. The equatorial room is equipped with an eight-inch refractor of the best modern construction, with finding circles, driving-clock, filar micrometer, and other accessories.

In the transit room is a Repsold vertical circle of two-inch aperture. These instruments, together with sextants, sidereal chronometer, etc., furnish excellent facilities for instruction in both descriptive and practical astronomy.

Lord Hall.—This building, named in honor of Honorable Henry Lord, Ex-President of the Board of Trustees, is designed for the departments of mechanical and electrical engineering. It consists of a main part, 82 x 56 feet in area and two stories in height, and an ell, 125 x 42 feet, partly of two stories and partly of one story. It contains six recitation rooms, a large drawing room, the shops, suitable laboratories, and offices for the professors and instructors. The mechanical laboratory contains a Riehle testing machine of 60,000 pounds capacity; an oil testing machine manufactured by Tinius, Olsen & Co., of Philadelphia, and other oil testing apparatus; belt testing apparatus, steam separators, calorimeters, and injectors. The hydraulic laboratory in the basement contains steam pumps for testing, a pressure tank, and other apparatus for experimenting in the flow of water in pipes, weir measurements, etc. The forge room is equipped with down draft forges, manufactured by the B. F. Sturtevant Co., of Boston. The dynamo laboratory is provided with six direct-current dynamos, two alternating-current dynamos, a rotary converter, transformer, ammeters, voltmeters, wattmeters, rheostats, switches, etc., affording accommodations for a section of fifteen students.

Holmes Hall.—This is a two-story brick building, 81 x 48 feet, standing south of Alumni Hall. It is occupied by the Maine Agricultural Experiment Station and is arranged as follows:

On the ground floor are five large chemical laboratories used in the analysis of foods, feeding stuffs, drugs, and fertilizers; the laboratory for vegetable pathology; and the biological laboratories. The general office and mailing room, the director's office, the laboratory for seed testing and photography, the entomological laboratories, and the library are on the second floor.

In the basement are rooms for the boiler, for the gas machine, for the grinding and preparation of samples, for the calorimeter, culture, and preparation rooms used by the vegetable pathologist, and rooms for the storage of fuel, chemicals, and glass ware. The large attic is used for the storage of samples and supplies. With the exception of the thermometers and rain gauge, the meteorological apparatus is in this building. The building is connected with the steam heating plant, supplied with gas and electricity, and is thoroughly equipped with apparatus for the work of agricultural investigation.

An attached greenhouse is used by the entomologist and vegetable pathologist.

Library.—The library, completed in 1906, is the most attractive building on the campus. For its erection and furnishing the sum of $55,000 was given, without conditions, by Mr. Andrew Carnegie.

The building is two stories above a basement which is almost entirely above the ground level. The stacks are in the rear of the main building, and have a capacity of 75,000 volumes, with a cataloging room on the first floor, opening from the librarian's office. The first floor of the main building contains an entrance hall, open to the dome; on one side is a periodical room, in the rear of which is a room for reserved books, and on the other side is a reference room which leads to the librarian's office; there is also a women's room on this floor. The second floor has a gallery surrounding a central open space, and on its walls, and in the entrance hall below, are the art collections; on the second floor also are a lecture hall, with a seating capacity of one hundred and twenty-five, and five seminar rooms. The basement contains a newspaper room, a club room in which meetings of the various student organizations are held, a janitor's room, a store room, and a men's room.

The library is heated by steam and lighted by electricity, and is thoroughly ventilated. Each floor of the stacks and each seminar room is connected by an intercommunicating telephone system with the librarian's office, the assistant's desk, and the janitor's room, and the librarian's office has telephone connection with the University branch exchange.

The Power House.—This wooden building, 30 x 56 feet, just north of Alumni Hall, contains two boilers, of one hundred and fifty, and one hundred horse power, respectively, a fifty horse power Corliss engine, a fifteen horse power Otto gasoline engine, and the dynamos, which comprise the lighting plant. Students in the electrical engineering course receive instruction in the care and running of this equipment.

The Horticultural Building.—The greenhouses, offices, and laboratories for horticultural work lie just east of Holmes Hall. The greenhouses cover about 4,000 square feet of surface, are heated with hot water, and furnish ample opportunity for the demonstration of the practical culture of flowers and vegetables under glass.

The Dairy Building.—The Dairy Building, 50 x 42 feet, contains a milk room, a butter room, a cheese room, a cold storage room, a cheese

curing room, a lecture room, and a laboratory. It is supplied with all necessary appliances for teaching the most approved methods of handling milk, cream, butter, and cheese. The building is supplied with hot and cold water. Power is furnished by a six horse-power engine.

Central Heating Plant.—The new central heating station is located across the car tracks from the University buildings, just above the Sigma Alpha Epsilon house, and on low ground so that practically all the buildings to be connected will drain by gravity to the plant, thus saving pumping or lifting of the returns.

The station is a plain red brick structure, without any attempt at ornamentation, but of good proportions, and large enough to provide room for present needs and allow for considerable future extensions.

The pump pit is 8 x 17½ feet, the engine room 17½ x 40 feet, the boiler room 40 x 42 feet, and the proposed coal pocket 32 x 42 feet.

The chimney is 100 feet high, and 60 inches in diameter. It is of radial brick construction and stands on a solid ledge. The station equipment consists of three 72-inch boilers, 17 feet 6 inches long, with 16 foot tubes. They are of butt joint construction, with double cover strips, and capable of running 150 lbs. pressure if necessary. In connection with the boiler plant there are two 6 x 4 x ½ feet boiler feed pumps, with receiving tank, for handling the return water of condensation as it comes back from the buildings, and putting it into the boilers. All necessary provisions have been made for the future installation of engines and generators to furnish light and power for the University when practicable. This plant supplies heat to nearly all the University buildings.

The Agricultural Building.—The Agricultural Building, completed during the past year, is the largest building on the campus. The ground plan covers 63 x 100 feet and the building contains over forty rooms. It is built of brick, concrete, and slate, of the Tudor style of architecture, and has four floors including a well lighted basement for lecture rooms and laboratories.

On the first floor are the offices of the Dean of the College of Agriculture, the faculty room and library, the offices and class rooms of the professors of agricultural chemistry, animal industry, and poultry husbandry, and the office and filing room of the extension department.

On the second floor are the office and lecture room of the department of agronomy, the farm crops laboratory with seed and plant storage rooms, the office and lecture room of the forestry department, the bacteriological laboratory, and the agricultural museum.

Across the front of the building on the third floor are the office, class rooms, refrigerator, and laboratory of the department of horticulture. The remaining half of this floor is occupied by a large lecture room and two draughting rooms separated from the larger room by folding doors, so that the three rooms can be thrown into a large auditorium at any time.

The basement is built high above the grade line so that the light and ventilation are good. It contains the office, lecture room, and operating room of the department of veterinary science, the timber testing laboratory, a dry kiln, and a wood storage room for forestry, the agricultural chemistry laboratory, the soil physics laboratory, dark rooms for photography, a room for mixing spraying solutions, and a toilet and bath room with shower baths.

The interior finish and furniture are in dark mission stain, and the building is equipped with electric lights, elevator, hot and cold water, gas, and high pressure steam for laboratory work.

The Stock Judging Pavilion.—Located about fifty feet to the rear of the Agricultural Building is an octagonal structure fifty feet in diameter. It is built of the same materials as the larger building and is used for scoring and judging stock. In the center of the structure is a ring twenty-five feet in diameter, and surrounding this ring are six rows of seats arranged in amphitheatre style. The building has a seating capacity of about six hundred and can be used for meetings too large for any of the rooms in the Agricultural Building.

The Poultry Plant.—The poultry plant of the College of Agriculture consists of an incubator cellar, 25 x 40 feet in size, built of brick with non-conducting walls. On top of this cellar has been erected a one and a half story frame structure in which are located a poultry apparatus laboratory, in which machinery of various kinds is operated, and storage rooms for feed, incubators, brooders, and other equipment. Attached to the incubator cellar is a brooder house, 15 x 40 feet, for winter instruction. It is equipped with hot water heater. The fattening and killing house is 14 x 45 feet in size with interior arrangement to demonstrate crate and pen fattening. A room 14 x 16 feet in one end of this house is used for a poultry dressing room and is equipped with water heater, cooling tanks, etc. The several breeds of fowls kept by the College of Agriculture for purposes of instruction are housed in colony houses of various styles and sizes.

The poultry plant belonging to the Experiment Station contains an incubator house, 31 x 31 feet, with tenement above; a poultry house,

12 x 150 feet; a poultry house, 16 x 120 feet; a two story house, 39 x 39 feet, containing three laboratories, feeding rooms, and storage rooms; a building containing a hospital for hens, 16 x 36 feet, and rooms for digestion experiments. The houses accommodate 700 mature birds. There are also detached brooder houses capable of caring for 2,500 chicks.

The Farm Buildings.—The lower barn, 100 x 50 feet, contains a modern tie-up with 26 stalls, two grain rooms, two bull rooms, nursery, calf room, and silo, and has storage capacity for 150 tons of hay and 100 tons of silage. The upper barn, 100 x 40 feet, contains rooms for grain and storage, scales for weighing animals, an electric motor for power, and a mill for grinding. The barns are lighted by electricity and supplied with water and steam. The basements of the barns contain storage rooms for manure and roots. The sheep barn, 125 x 20 feet, is of special design and contains six large pens, a nursery, and a storage room. Two tool houses furnish 10,000 square feet of floor room for the storage of wagons and farm machinery.

A modern up-to-date piggery, 28 x 40 feet in size, has been erected, which contains eight pens, together with grain and feed cooking rooms.

A ten room farm cottage, occupied by the men employed in the different departments comprising the College of Agriculture has also been erected.

The Mt. Vernon House.—This is a wooden building, completed in 1898, which provides dormitory accommodations for women. It is situated near the recitation and laboratory buildings, upon a site overlooking the campus and commands a beautiful view of the river, villages, and hills. It is two stories in height, built in the colonial style, and consists of a long central portion and two wings. It contains a parlor, dining-room, kitchen, bath-room, and ten study rooms, intended for two students each. The rooms are large, well lighted, heated by steam, and provided with electric lights. A special feature is the long hall on each floor, extending sixty-six feet, and wide enough to serve as an assembly or study room. Mt. Vernon House is under the supervision of a matron.

The Fraternity Houses.—Eleven of the student fraternities occupy club houses. Nine of the houses are on the campus, and two in the village of Orono. They are large, well arranged houses, affording rooms for about twenty-five students each. Several of the fraternities maintain their own boarding establishments.

The Infirmary.—A small wooden building has been erected on the back campus, to be used in caring for any cases of infectious disease

that may appear among the students. It contains a ward for women, as well as one for men, with sanitary, comfortable, and convenient equipment for patients.

Other Buildings.—In addition to the buildings already described, there are several others devoted to various purposes. Among these are the President's house, the Commons, or general boarding house, and three residences occupied by members of the faculty.

The Athletic Field.—Alumni Field, so called because funds required for its construction were contributed by the Alumni Association, is located at the northern end of the campus, about 1,200 feet from the Gymnasium. It contains a quarter-mile cinder track, with a 220-yard straightaway, and is graded and laid out for football, baseball, and field athletics.

THE LIBRARY

The library contains over thirty-seven thousand bound volumes and over ten thousand pamphlets, and includes the library of the Experiment Station, which contains about two thousand volumes, and that of the College of Law, which contains about three thousand volumes. Reference libraries are maintained in departmental rooms by those departments which require them.

More than half the volumes in the library have been added within the last ten years. Accessions average about 2,500 annually, and the greater part of these are acquired by purchase. In large part purchases are made of books selected by heads of departments, and this method results in a collection of great working value.

The library is classified according to the Dewey system, slightly modified; there is a card catalog arranged by authors and subjects; access to the shelves is entirely unrestricted. Students may borrow three volumes at a time, to be retained three weeks, when they may be renewed, unless previously called for; special permission to borrow a larger number may be obtained, when necessary, upon application to the librarian. There is a fine of two cents a day for books kept over time. Officers and alumni of the University may borrow any reasonable number of volumes without time limit, except that all books must be returned at least nine days before Commencement, and the return of any volume may be required at any time by the library committee. Other responsible persons may obtain the privileges of the library upon application to the Librarian. The Librarian and his assistants are glad to give advice and help at any time.

The library is a designated depository for the publications of the United States Congress, and also receives publications of different departments not included in the depository set. All the publications of the State of Maine are received. Through the courtesy of the late Hon. L. D. Carver, State Librarian, public documents of a number of other states are received, in accordance with a series of exchanges arranged by him.

Over three hundred and fifty of the most important literary, scientific, and technical periodicals, both American and foreign, are regularly received. The leading papers of Maine, together with a selected list of daily papers published in the large cities, are on file.

The library is open daily from 8.00 A. M. to 12.00 M., and from 1.30 to 5.30 and from 7.00 to 9.30 P. M., Sundays and legal holidays excepted. On Sunday it is open from 2.30 to 5.30 P. M. During the vacations it is open from 9.00 A. M. to 12.00 M., and from 2.00 P. M. to 5.00 P. M. each week day, except Saturday, when it is open in the forenoon only.

THE MUSEUM OF NATURAL HISTORY

GILMAN ARTHUR DREW, Director
Curator of the Zoölogical Collections
LUCIUS HERBERT MERRILL
Curator of the Geological Collections
MINTIN ASBURY CHRYSLER
Curator of the Botanical Collections
CYRUS SKILLINGS WINCH
Taxidermist and Assistant Curator of the Zoölogical Collections

The museum is located in the wing of Coburn Hall and in an adjoining room in the main part of the building.

The taxidermist devotes his entire time to the museum, and contributors may be assured that their donations will be properly cared for. Valuable specimens that could be saved for the museum with little expense of time or money are frequently allowed to go to waste. While the museum is not in a position to pay for specimens it will gladly arrange for their transportation, and the name of the donor will be placed on the specimen label. The locality and date of collection should accompany each specimen, as well as the name of the donor and such other information as might prove valuable.

Geological Collections.—These collections occupy the upper floor of the wing of Coburn Hall. Six new cases for the exhibition of specimens and storage of duplicate material have been placed in this room, and the museum has been entirely reärranged. The collections include the more important fragmental, crystalline, and volcanic rocks; a collection of building stones; a series designed to illustrate the rocks of the state; a general collection of the more common minerals; a collection of economic minerals furnished by the U. S. National Museum; an educational series of rocks furnished by the U. S. Geological Survey; and a small collection of plant and animal fossils.

The part of the museum illustrating the mineral resources of the state may be made of great value, both from the scientific and economic standpoint, and especial pains will be taken to build up the collections as rapidly and completely as possible.

Zoölogical Collections.—These collections occupy the lower floor of the wing of Coburn Hall and arrangements are being made to place exhibition cases in the corridors. Some of the alcoholic and formaline material is placed in wall cases in the biological laboratories. The collections consist of a number of the larger mammals of the state, a small set of exotic mammals, a more complete working collection of native birds, birds' nests, and eggs, an illustrative collection of the other groups of vertebrates, a rather large collection of the shells of native and exotic molluscs and illustrative collections of the other groups, dry, alcoholic, and prepared as microscopic objects.

During the year the taxidermist, beside preparing many birds and small mammals for exhibition, has completed three notable pieces and has a fourth well under way. The three pieces consist of a young cow moose, that was killed by a locomotive, and was donated to the museum by the Fish and Game Commissioners of the state, a case of partridges and a case of gullemots and terns. All of these have been mounted with groundwork that represents the natural surroundings of the animals. The moose at present occupies only a portion of a case but is expected to form one of a group as soon as satisfactory material for a group can be procured and put in place. The partridges, six in number, occupy a case by themselves near the center of the room and are mounted in various attitudes that are consistent with their surroundings. The gullemots and terns occupy a wall case that is placed in the corridor of the first floor. It consists of five gullemots and two terns, which are represented as perched upon a ledge of rock. The uncompleted piece is much larger than any of the others. It consists of an adult and spike-horned buck and an adult and young doe. When completed it will have groundwork to represent the natural surroundings of these animals. The specimens that form this group were presented by Mr. H. H. Hanson, Mr. Frank P. Lane, and the taxidermist. This group occupies a conspicuous position near the door.

The most notable donations to the zoölogical collections this year were made by Mr. Lewis R. Cary, of the class of 1901, who collected and prepared as a gift to the museum, the skins of about eighty birds from Louisiana. Many of these have been mounted and are now on exhibition. They, together with those that are still to be mounted, form a greatly appreciated addition to the collection of water birds.

Others to whom the museum is indebted for many valuable donations are Messrs. A. H. Sampson, Albert Sampson, H. R. Wing, E. H. Dakin, E. R. Gross, and Harry White. Many students and other friends of the University have contributed one or more specimens each. The combined donations of birds and mammals alone, number nearly three hundred

specimens for the year and add greatly to the efficiency of the collections.

Botanical Collections.—These collections are situated in rooms on the second and third floors of Coburn Hall. The herbarium includes several collections of considerable value, the most important of which is the one presented to the University by Mr. Jonathan G. Clark, of Bangor, and made by the late Rev. Joseph Blake. It contains more than 7,000 species of both flowering and flowerless plants, and represents more especially the flora of Maine and other New England States, but includes many forms from the western United States, Mexico, and the West Indies, and a number from many of the European and Asiatic countries, and from Africa and Australia. The late Professor Harvey left to the herbarium the general collections accumulated during his connection with the University, and his special collection of the weeds and forage plants of Maine, comprising 300 species. Other important collections are Collins's Algæ of the Maine coast, Halsted's Lichens of New England, Halsted's Weeds, Ellis and Everhart's North American Fungi, Cook's Illustrative Fungi, Underwood's Hepaticæ, Cummings and Seymour's North American Lichens, and a collection of economic seeds prepared by the U. S. Department of Agriculture. A set of specimens illustrating the wood of the most important timber trees of this state has recently been presented by Mr. B. T. Harvey. Certain other exhibits illustrating economic plant products have been installed, including fibres, pharmaceutical products, and cocoa.

THE ART COLLECTION

The establishment of the Classical department in the University of Maine, in 1899, marked the beginning of an awakened interest in the College of Arts and Science. Parallel with the introduction of these studies has been the interest in an art collection which serves to vitalize and intensify the work in the humanities.

The collection which has gone forward with rapid growth consists of photographs, prints, engravings, polychrome reproductions, and plaster casts. Many of the large reproductions are framed and the entire collection has found a fitting home in the Library, the gallery of which is well adapted to the exhibition of many of the plaster-cast reliefs and the larger framed works. The collection is distributed on the first and second floors, in the large lecture room, and in a seminar room. In the latter is a specially constructed cabinet for the mounted photographs.

The entire collection numbers upwards of 4,000 reproductions of various sorts covering the fields of Classical and Renaissance architecture, sculpture, and painting. The illustrations for the Greek, Florentine, and Venetian schools are particularly representative. For much of the most important work the photographs are supplemented by lantern slides.

The University is fortunate in possessing many of the famous polychrome prints published by the Arundel Society. These and many other colored reproductions covering nearly all the great masters of Italian painting have been framed; and in the case of the *Madonna della sedia* and the *Sistine Madonna* the reproductions were imported in the frames which are stucco copies of the originals in Dresden and Florence.

The large lecture room in the Library contains examples of the work of the chief Florentine and Umbrian masters of the 14th and 15th centuries, arranged on the walls in historical sequence. The gallery of the second floor is devoted to masters of the High Renaissance.

For the study of Greek and Roman antiquity the Classical departments have a large collection of photographs and lantern slides. A stereopticon lantern is a part of the regular equipment in Classics and Art.

ORGANIZATIONS

The following is a list of organizations existing in the University: The Deutscher Verein, the Cercle Français, the Debating Society, the Electrical and Mechanical Society, Alpha Zeta, the Agricultural Club, the Civil Engineering Society, the Chemical Society, the Literati, the Dramatic Club, the Phi Kappa Phi (honorary), the Young Men's Christian Association, the Young Women's Christian Association, the Round Table, the Athletic Association, the Glee Club, the Instrumental Club, the Band.

Junior Electrical and Mechanical Society.—The Junior Electrical and Mechanical Society aims to unite the interests of the electrical and mechanical students and to keep its members in touch with the practical side of engineering. The society meets each week when topics of practical interest are explained and discussed. All juniors in electrical or mechanical engineering are eligible to membership, and seniors are honorary members.

Junior Civil Society.—This society is composed of the members of the junior class who take the course in civil engineering. The object of the society is to investigate by reading and discussion the various engineering topics of the day. Monthly lectures are given under the

direction of the society by members of the faculties of other institutions and by other practicing engineers.

The affairs of the society are controlled by the students under the advice of the head of the department of civil engineering.

Alpha Zeta.—The Maine chapter of Alpha Zeta, the national agricultural fraternity, was organized at the University in 1905. Chapters exist in fourteen other universities. Membership is honorary and is restricted to those attaining high class standing, or to those who have shown marked ability along the lines of agricultural study and research.

The Agricultural Club.—This organization is composed of students taking agricultural courses. Meetings are held throughout the college year, at which important agricultural topics are discussed by members of the club, and also by prominent speakers from this and other states.

The Dramatic Club.—The Dramatic Club aims to make a practical study of the acted drama, and to present each year before the public one or more representative plays. Membership is determined by competitive trials to which all undergraduates are eligible.

The Literati.—This is an organization in the College of Arts and Sciences for the promotion of the literary, dramatic, and musical interests of the University.

Deutscher Verein.—This society, organized 1902, is composed of students and teachers. Its purpose is to stimulate interest in the various phases of German life and literature and afford practice in speaking German. The number of members is in practice limited. Meetings are held every three weeks during the academic year.

Cercle Français.—The object of the Cercle Français of the University of Maine is to cultivate the spoken French language and arouse and stimulate an interest in the intellectual life of France among the students of the University. The work is carried on in French. Papers are read and discussed and addresses delivered by the members. Plays are studied with a view toward production in French. The Cercle Français meets once in two weeks.

Phi Kappa Phi.—The Phi Kappa Phi is an honorary society. At the end of the fall semester of the senior year the five members of the class having the highest standing are elected members, and at the end of the

year the five next highest in the collegiate department, and two from the College of Law, are added.

The Young Men's Christian Association.—The Young Men's Christian Association, composed of students, has for its object the promotion of Christian fellowship and aggressive Christian work. Religious services are held in the Library, and classes for the study of the Bible are conducted on Sunday. This association is a branch of the national Young Men's Christian Association.

The Young Women's Christian Association.—This is an organization for religious work composed of women students.

Round Table.—The Round Table is an organization of the wives of the professors in the University. Its purpose is to promote the social welfare of the students. For the past two years a monthly reception has been given to the students in the Club Room of the Library, by the ladies of the Round Table. These receptions are to continue as a regular feature of the social life of the University.

UNIVERSITY PUBLICATIONS

The Annual Catalog of the University of Maine.—This contains descriptions of the courses of study, lists of the trustees, faculty, and students, and other information relating to the University.

The Annual Report of the Trustees, President, and Treasurer, to the Governor and Council of the State.—The report of the trustees and president includes an account of the general affairs and interests of the University for the year, and the report of the Experiment Station. The report for the odd years contains the biennial catalog of graduates.

The University of Maine Studies.—These are occasional publications containing reports of investigations or researches made by university officers or alumni.

The University Circulars.—These are occasional pamphlets, issued for special purposes. Those now ready for distribution relate to the Classical Course, the Courses in Agriculture, the Courses in Pharmacy, the College of Law, the College of Arts and Sciences, the Courses in Engineering, the Courses in Forestry, Student Expenses, and the Summer Term.

THE MAINE BULLETIN.—This is a publication issued monthly during the academic year, to give information to the alumni and the general public.

THE ANNUAL REPORT OF THE EXPERIMENT STATION, AND THE EXPERIMENT STATION BULLETINS.—These give complete results of the work of the station.

THE MAINE CAMPUS.—This is a journal published weekly during the academic year by an association of the students.

THE PRISM.—The Prism is an illustrated annual, published by the junior class.

THE BLUE BOOK.—This is a literary magazine published monthly by the students.

MILITARY INSTRUCTION

Military instruction is required by law. The department is in charge of an officer of the regular army, detailed by the President of the United States for this purpose. United States army rifles, model 1898, ammunition, and accoutrements are furnished by the War Department. The course makes especial preparation for the duties of infantry officers of the line. The students are organized into an infantry battalion of four companies, officered by cadets selected for character, soldierly bearing, and military efficiency. The corps is instructed and disciplined in accordance with rules established by the President of the United States. These rules include the minimum course of instruction that must be covered, and the minimum time that must be devoted to this instruction.

The uniform prescribed by the board of trustees is as follows:

For commissioned officers, the new olive-drab service uniforms prescribed for infantry officers of the United States Army, except that "Maine" insignia and buttons are used; for non-commissioned officers, the new olive-drab service uniforms of the United States Army, except that "Maine" insignia and buttons are used, and trousers instead of breeches. The total cost of the uniform is $14.15. The uniforms are procured through an authorized tailor, and are made in the best manner, of thoroughly good material. Cadets are required to wear the uniform when on military duty, and may wear it at other times.

The three seniors who attain the highest standing in the military department are reported to the military secretary of the U. S. Army, and their names are printed in the U. S. Army Register. Cadets who have

satisfactorily completed the course in military science receive at graduation a certificate of military proficiency and are reported to the Adjutant General of Maine.

All students physically qualified are required to take one year's military work during their first year at the University, except that those admitted to advanced standing may elect other work equal to one credit. One credit is allowed for this work. Those physically disqualified are required to elect other work equal to one credit in lieu of military work. Graduation requirements include one year's military work, or a substitute under the above conditions. No fractional credit for military work will count towards graduation. Military instruction is arranged in a four years' course. After the freshman year the work is elective. Students in the College of Law, the School Course in Agriculture, and the Short Course in Pharmacy, are excused from military work.

The grades and relative rank of officers and non-commissioned officers will be determined by the Professor in charge, subject to the approval of the President.

PHYSICAL TRAINING

Physical training is required of sophomores two hours per week. Credit is given on the basis of three hours of physical training to one hour of recitation. All other students may elect this work and receive credit. Students registered on athletic teams are excused from this prescribed physical training during the time they are engaged in the regular athletic training, but no credit will be given for the athletic training unless the physical training is taken for the remainder of the year. Sophomores electing military work will be excused from work in physical training. Every student registering for an athletic team must pass the required physical examination.

All students have the opportunity of taking a systematic course in physical training. The athletic field is situated a short distance from the gymnasium; it has a quarter-mile running track with a 220 yard straightaway and is graded and laid out for football, baseball, and track athletics. Here the men may exercise for recreation or train for active competition. There are several tennis courts on the University campus. On the Stillwater river canoeing may be enjoyed, as well as skating and ice hockey in the winter.

The gymnasium affords excellent opportunity for physical training. On the first floor are the main offices, the office of the physical director, the baseball cage, lockers, bath rooms, and toilet rooms. The gymnasium proper is located on the second floor. There is a floor space of 6,262

square feet and an overhead running track. This is supplied with an equipment of modern apparatus for heavy and light gymnastic work.

All male students exercising at class hours wear the regulation suit which consists of white shirt, white running pants with blue stripe, and white rubber sole shoes.

It is the aim of the department of physical training to encourage participation in all forms of wholesome out-door exercise and to arouse a general interest in athletic sport. In this way the benefits will become less and less confined to the few who need them least.

Instead of requiring gymnasium work of students who do not particularly need it, those who are physically fit are encouraged to register for an athletic team, the department of physical training maintaining a reasonable supervision to insure regularity.

PUBLIC WORSHIP

Short religious services are held in the chapel every day except Saturday and Sunday. All undergraduate students are required to be present. Students receive a cordial welcome at all services in the churches of the village. Voluntary religious services, under the direction of the Young Men's Christian Association, are held twice each week. The Day of Prayer for Colleges is observed with appropriate exercises. Vesper services are held during the year in the University chapel Sundays at 4 P. M. At these services representatives of the various religious denominations of the state are present and address the students.

GENERAL REGULATIONS

The regulations in regard to the selection of studies, standing and grades, absences from recitations and examinations, entrance conditions, leave of absence, attendance upon chapel, penalties, examinations, and athletics, are printed in a pamphlet, which may be obtained from the Secretary.

By these regulations, the quota of regular studies for each student varies from a minimum of fourteen hours to a maximum of twenty-two hours of class-room work each week. In the application of this rule, two hours of laboratory work, or of other exercises not requiring preparation, count as one hour, unless it is otherwise stated.

Excuses for absence from individual exercises are not required. Each student is expected to be present at all recitations and other exercises except when imperative reasons require absence. Of these reasons he is the judge; but if any student shall, in one semester, have been absent,

without excuse, fifteen times from chapel, or seven times from a subject occurring five times a week, or six times from a subject occurring four times a week, or four times from a three hour subject, or two times from a two hour subject, or once from a one hour subject, he shall be notified by the Secretary. If after such notice he shall have two additional unexcused absences he shall be placed under the censure of the Faculty, and if the absences are from class work he shall also be excluded from examination. Notice of such exclusion shall be given to the student at once by the Secretary. If after notice of exclusion he shall have any more unexcused absences in the same subject he shall be dropped from that class.

Written examinations are held immediately before the beginning of the fall semester for all studies in arrears. A student absent from the University by permission of the Faculty, at the time of these arrearage examinations, may have a special examination at such time as may be arranged with the instructor under whom the arrearage occurred. For such a special examination a fee of two dollars shall be paid to the University. A student who fails to make up an arrearage in a required subject before the study is again given in class is required to attend recitations in that study, or make up the work under a tutor selected by the Faculty.

Each student is given a report of his work shortly after the close of each semester. Parents or guardians may obtain these reports upon application to the Secretary. The passing rank in all subjects is seventy per cent.

SCHOLARSHIP HONORS

Honors for scholarship are of two kinds, general and special. General honors are awarded, at graduation, to students who attain an average standing, after the freshman year, of ninety on a scale of one hundred. Special honors are granted for the satisfactory completion of an honor course in addition to the work required for a degree. An honor course must involve at least ninety recitations, or an equivalent, and be completed in one year. The methods of work are determined by the instructor, who should be consulted in each case by students desiring to take such a course. Honor courses are open to juniors and seniors who have attained an average standing of eighty per cent. in all previous work, and an average standing of ninety per cent. in all previous work of the department in which the honors are sought. A student may not register for an honor course later than the fourth week of the fall semester. Upon the completion of a course, the student's work will be tested by an examination, or thesis, or both, under the direction of the faculty

committee on honors, and the result, together with the instructor's report, will be laid before the Faculty. Examinations for honors shall be held at such times and places as the committee on honors may appoint. They shall be distinct from any class examinations in the same course, which latter examinations the candidate for honors may or may not take, as he chooses. The honor examination shall be written and, if the committee so desires, also oral. The professors giving the courses shall submit to the committee papers for the honor examinations not later than one week before the date set for the examinations.

The students in honor courses involving laboratory or drawing-room work may be tested by examination, or thesis, or both, at the discretion of the committee. The note-books kept in such work shall be submitted to the committee and may take the place of a thesis in case they show practically the whole work of the course. The Faculty may grant special honors to those students who receive the approval of the committee, but shall not do so if the general work is unsatisfactory. Honors and their nature are stated upon the Commencement program and published in the annual catalog.

The fifteen of highest rank in the senior class are authorized to prepare Commencement parts; these parts must be submitted to a committee by the close of the spring recess, and from the parts submitted, a certain number are selected by the committee. These parts must be prepared for delivery to the satisfaction of a representative of the Faculty.

DEGREES

Bachelors' Degrees

The degree of Bachelor of Arts (B. A.) is conferred upon students who have passed the proper entrance requirements and have included in their course one year's work in either Latin or Greek.

The degree of Bachelor of Science (B. S.) is conferred upon students who complete the Chemical, Agricultural, Civil Engineering, Mechanical Engineering, Electrical Engineering, Chemical Engineering, Forestry, or Pharmacy Course; or who have completed a general course with major work in some one department. The diploma indicates which course has been completed.

The degree of Pharmaceutical Chemist (Ph. C.) is conferred upon students who complete the Short Pharmacy Course.

The degree of Bachelor of Laws (LL. B.) is conferred upon students who complete the Law Course.

In order to receive degrees at Commencement, candidates must have completed by the close of the spring recess, at least seven-eighths of all

the work required for graduation, with the exception of arrearage courses repeated in class during the spring semester of the senior year in accordance with the rules.

A member of the senior class who at the end of the first semester is deficient in any subject in which no regular examination is to be held during the remainder of the year, may have one examination not later than the last Friday of the year, at such time and in such manner as the instructor having charge of that study may determine. Except under extraordinary circumstances, no special examination will be allowed to a senior who fails in, or is excluded from, a final examination at the end of the spring semester.

Theses required from candidates for the degree of B. S. must be completed to the satisfaction of the major instructor and deposited in the library, accompanied by the binding fee, not later than twelve o'clock (noon), nine days preceding Commencement. They shall be printed or typewritten, unless the subject matter prevents, on paper of good quality, 8 x 10½ inches, with not less than one inch margin on the inner edge and half-inch margin on the outer. They shall be bound in black leather with title on first cover. Drawings accompanying a thesis may be folded and bound with the thesis, or placed in a pocket on the third page of the cover; or, if too many for this, they may be bound separately, in size to suit the drawings.

Candidates for degrees who fail to meet these requirements will not be awarded their degrees, and their names will not appear on the Commencement program. A minimum residence of one year is required for the attainment of any bachelor's degree.

Advanced Degrees

Graduate students, whether candidates for a degree or not, are required to register at the office of the University at the beginning of each college year, not later than Oct. 1. Those entering the University after that date must obtain the consent of the committee of advanced degrees before they can count a full year's work.

Candidates for the degree of Master of Arts or Master of Science must have received the corresponding bachelor's degree from this institution, or from one granting a fully equivalent degree.

At least one year must elapse between the conferring of the bachelor's and master's degrees.

No work done before the conferring of the bachelor's degree shall be counted toward the master's degree.

The candidate shall devote at least one year to graduate resident study and shall complete work of the equivalent of six credits or fifteen hours per week throughout a college year.

The course of study for each candidate must be approved by the committee on advanced degrees not later than the first week in October. A registration fee of $5 is charged, and an additional fee of $15 for examinations and diploma is payable upon the completion of the work. One registration fee is required for graduate students.

The course of study shall consist of work in one major department or subject in which the candidate has already pursued undergraduate study for at least two years, and work in not more than two minor subjects which bears a distinct relation to the general plan or purpose of his major subject.

At least three-fifths of the work must be done in the major subject, in special cases all the work may be done in one department.

All of the work must be of advanced character and must be tested by examinations which the candidate must pass with distinction.

The candidate shall prepare as a part of his course of study a satisfactory thesis on some topic connected with his major subject which may count for not more than three of the required fifteen hours. Theses must be submitted not later than May 20th. The same regulations regarding the size and style of binding, outlined under the Bachelor's degree, apply here.

For the conditions for the degree of Master of Laws see the statements under the College of Law.

The professional degrees of Civil Engineer (C. E.), Mechanical Engineer (M. E.), and Electrical Engineer (E. E.), may be conferred upon graduates of the Civil Engineering, Mechanical Engineering, and Electrical Engineering courses, respectively, upon the presentation of a satisfactory thesis after at least three years of professional work subsequent to graduation. A fee of $10.00 is required, payable upon presentation of the thesis, which must be submitted not later than May 20. Candidates are expected to be present in person to receive their degrees.

STUDENT EXPENSES

Many students go through college with an annual expenditure of little more than $200, exclusive of the expense of clothing, travel, and vacation, and very many earn a part of this sum by vacation work. An estimate of the necessary annual expenses of a student in any department, except the College of Law, is made in the following table. For the expenses of students in the College of Law, see the article on that College. It should be noticed that clothing, traveling, vacation, society, and personal expenses are not included in the table. These vary according to individual tastes and habits. The table is made up for

men students who room in Oak Hall and board at the Commons. The necessary expenses of other students are sometimes lower, but usually slightly higher. In all cases an allowance must be made for personal incidental expenses.

By action of the Legislature of 1909, the charge to Engineering students from outside the State of Maine, for the next four years, is to be $100 per year instead of $70.

The charge for students from outside the State of Maine in all other courses remains the same as heretofore, $70 per year.

No other charges except laboratory fees.

The tuition charge is $15.00 a semester, or $30.00 a year, and all students are subject to this charge except those in the courses in agriculture, for none of which is any *tuition* charge made, but incidental and registration fees are the same as in other courses. Residents of Maine who need assistance and maintain a good record may obtain loans from the University to cover the tuition charge.

Students who are not residents of the State of Maine are charged an annual tuition of $40.00.

The registration fee of $5.00 must be paid at the beginning of each semester before the student enters any classes.

The incidental fee is $10.00 a semester, or $20.00 a year, and covers heat and light for public buildings, reading-room charges, care of public rooms, and miscellaneous expenses.

A student obliged to leave the University within two weeks after the beginning of the semester may have the foregoing amounts refunded with the exception of the registration fee. A student leaving within the first half of the semester receives a rebate of one-half the incidental expenses, and one-half of the tuition. No other rebate is made.

The cost of text-books will average about $15.00 a year for the course. These may be bought at the college store. The expense may be decreased by buying second-hand books.

Students in the laboratories and shops pay certain charges to cover the cost of materials and maintenance. These charges are as follows: chemistry, per semester, about $3.00; bacteriology, per course, $3.00; physics, per course, $2.50 to $3.50; pharmacy, per semester, about $3.50; mineralogy, $2.00; biology, per course, $2.00 to $3.00; civil engineering,

The course of study for each candidate must be approved by the committee on advanced degrees not later than the first week in October. A registration fee of $5 is charged, and an additional fee of $15 for examinations and diploma is payable upon the completion of the work. One

factory thesis on some topic connected with his major subject which may count for not more than three of the required fifteen hours. Theses must be submitted not later than May 20th. The same regulations regarding the size and style of binding, outlined under the Bachelor's degree, apply here.

For the conditions for the degree of Master of Laws see the statements under the College of Law.

The professional degrees of Civil Engineer (C. E.), Mechanical Engineer (M. E.), and Electrical Engineer (E. E.), may be conferred upon graduates of the Civil Engineering, Mechanical Engineering, and Electrical Engineering courses, respectively, upon the presentation of a satisfactory thesis after at least three years of professional work subsequent to graduation. A fee of $10.00 is required, payable upon presentation of the thesis, which must be submitted not later than May 20. Candidates are expected to be present in person to receive their degrees.

STUDENT EXPENSES

Many students go through college with an annual expenditure of little more than $200, exclusive of the expense of clothing, travel, and vacation, and very many earn a part of this sum by vacation work. An estimate of the necessary annual expenses of a student in any department, except the College of Law, is made in the following table. For the expenses of students in the College of Law, see the article on that College. It should be noticed that clothing, traveling, vacation, society, and personal expenses are not included in the table. These vary according to individual tastes and habits. The table is made up for

en students who room in Oak Hall and board at the Commons. The ecessary expenses of other students are sometimes lower, but usually ightly higher. In all cases an allowance must be made for personal cidental expenses.

ANNUAL STUDENT EXPENSES

Tuition, 2 semesters at $15.00 or $20.00	$30.00 or $40 00
Registration fee, 2 semesters at $5.00	10 00
Incidentals, 2 semesters at $10.00	20 00
Laboratory fees, (average) about	10 00
Text-books, about	15 00
Board, 36 weeks at $3.00 or $3.50	$108.00 or 126 00
Heat and light for half room, and general care of dormitory	30.60
Toal	$223.60 or $251 60

The tuition charge is $15.00 a semester, or $30.00 a year, and all stu- nts are subject to this charge except those in the courses in agriculture, r none of which is any *tuition* charge made, but incidental and regis- ation fees are the same as in other courses. Residents of Maine who ed assistance and maintain a good record may obtain loans from the niversity to cover the tuition charge.

Students who are not residents of the State of Maine are charged an nual tuition of $40.00.

The registration fee of $5.00 must be paid at the beginning of each mester before the student enters any classes.

The incidental fee is $10.00 a semester, or $20.00 a year, and covers at and light for public buildings, reading-room charges, care of public oms, and miscellaneous expenses.

A student obliged to leave the University within two weeks after the ginning of the semester may have the foregoing amounts refunded with e exception of the registration fee. A student leaving within the first lf of the semester receives a rebate of one-half the incidental expenses, d one-half of the tuition. No other rebate is made.

The cost of text-books will average about $15.00 a year for the course. ese may be bought at the college store. The expense may be decreased buying second-hand books.

Students in the laboratories and shops pay certain charges to cover e cost of materials and maintenance. These charges are as follows: emistry, per semester, about $3.00; bacteriology, per course, $3.00; ysics, per course, $2.50 to $3.50; pharmacy, per semester, about $3.50; neralogy, $2.00; biology, per course, $2.00 to $3.00; civil engineering,

$2.00 to $5.00; electrical engineering, per course, $2.50; mechanical engineering, per course, $2.00; shop, per course, $4.00 to $5.00.

The largest item of expense is board. At the Commons, the university boarding house, the price is about $3.00 a week. Board may be obtained in clubs or private families at prices ranging from $3.00 to $4.00 a week.

The charge for rooms in Oak Hall is eighty-five cents a week for each student, when two occupy a room. This pays for heat and light, and for the lighting and care of the halls, public rooms, and dormitory. Furnished rooms, with light and heat, may be obtained in the village for $1.50 a week if occupied by one person, or $2.00 to $3.00 a week if occupied by two persons.

Women students who do not live at their own homes are required to room and board at the Mt. Vernon House. All the rooms in this house are supplied with the larger articles of furniture. Six of the ten rooms are corner rooms and the rent, including heat and light, is $1.25 a week for each person when two occupy one room. The rate for the other rooms, including heat and light, is $1.00 a week for each person, with two in a room. The price of board is $3.50 a week.

Students in Oak Hall supply their own furniture with the exception of a cot bed. Applicants for rooms in Oak Hall or Mt. Vernon House should make early application to the Secretary, as the accommodations are limited. Students are required to furnish three sheets and two pillow cases in addition to the other bedding. All students, except incoming freshmen, who reserve rooms in Oak Hall will be required to make a deposit of $5.00 before August first.

Each student is required to deposit with the treasurer a bond, with two good names as sureties, in the amount of $150.00 to cover bills. Blank forms for bonds will be furnished by the Secretary upon application. Those who keep a sufficient deposit with the Treasurer to cover the bills of one semester will not be required to furnish a bond. The deposit required is $90.00 from those who board at the Commons or Mt. Vernon House, and $30.00 from others. This deposit is in addition to the registration fee, and must be paid at the beginning of each semester. No student will be allowed to graduate who is in debt to the treasury.

A circular containing a fuller statement in regard to expenses and treating of the opportunities for self-help may be obtained upon application.

LOANS

Tuition Loans

Residents of Maine who need assistance and maintain a satisfactory record may borrow from the university treasury a sum sufficient to pay

the tuition charge. This privilege is not extended to students in the College of Law.

Borrowers are required to give notes with satisfactory endorsement. The loans bear interest at six per cent. per annum, and are due at the rate of $30.00 a year, beginning with the first year after graduation, but may be paid earlier. No member of the Faculty is accepted as an endorser.

Loans are granted by a committee consisting of the President and two other members of the Faculty. The number of loans may not exceed one-third of the number of students in the undergraduate departments. Loans are granted to cover the tuition charges of one year at a time.

The first grant of loans for each university year is made in the preceding June. Applications for loans are considered during May, and to insure attention at this time should be forwarded to the President not later than May 15. A second award is made in the fall semester. Applications should be made not later than October 10. They must be made to the President upon blanks to be obtained from the Secretary of the Faculty. Awards made in June may be withdrawn from students who do not register, or claim their loans, by October 10.

The Kittredge Loan Fund

This fund, amounting to nearly one thousand dollars, was established by Nehemiah Kittredge, of Bangor. It is in the control of the President and Treasurer of the University, by whom it is loaned to needy students in the three upper classes. In the deed of gift it was prescribed that no security, but personal notes bearing interest at the prevailing rate should be required. Loans are made on the conditions that the interest shall be paid promptly, and that the principal shall be returned from the first earnings after graduation.

SCHOLARSHIPS AND PRIZES

The Kidder Scholarship, thirty dollars, was endowed by Frank E. Kidder, Ph. D., Denver, Colorado, a graduate of the University, of the class of 1879, and is awarded to a member of the junior class to be selected by the President and the Faculty.

The Western Alumni Association Scholarship, tuition for the sophomore year is awarded to that student taking a regular course, whose deportment is satisfactory, and who makes the best progress in all studies during his freshman year.

The Junior Exhibition Prize, fifteen dollars is awarded to that member of the junior class who presents the best oration at the junior exhi-

bition. In the award of this prize, both the composition and the delivery of the oration will be considered.

The Sophomore Declamation Prize, fifteen dollars, for excellence in elocution, is awarded to the best speaker in the sophomore class.

The Walter Balentine Prize, fifteen dollars, the gift of Whitman H. Jordan, Sc. D., Geneva, N. Y., a graduate of the University, of the class of 1875, is awarded to that member of the junior class who excels in biological chemistry.

The Kennebec County Prize, twenty-five dollars, the gift of Hon. William T. Haines, Waterville, a graduate of the University, of the class of 1876, is awarded to that member of the senior class who writes the best essay on applied electricity.

The Franklin Danforth Prize, ten dollars, the gift of the Hon. Edward F. Danforth, Skowhegan, a graduate of the University, of the class of 1877, in memory of his father, Franklin Danforth, is awarded to that member of the senior class in the agricultural course who attains the highest standing.

The Pharmacy Prize, five dollars is awarded to that student in the pharmacy department who attains the highest standing in chemistry in the last year of his course.

The Holt Prizes, the gift of Erastus Eugene Holt, A. M., M. D., LL. D., of Portland, is given to the three students of the senior class who show the greatest improvement in their rating. The rating will be determined from deductions made from the gymnasium and class records of the students at the beginning and end of their college course by the mathematical formula for the normal earning ability of the body, devised by Dr. Holt.

The Boston Alumni Association Scholarship, thirty dollars, is awarded to that member of the junior class who makes the most satisfactory progress in all studies during the junior year, and whose deportment is satisfactory, and who needs financial assistance.

The New York Alumni Association Scholarship, thirty dollars, is awarded upon conditions to be determined by the Board of Trustees. In 1907-8 it was awarded to the student who excelled in debate.

The Pittsburg Alumni Association Scholarship, yielding tuition for one year, is awarded to a member of the junior class in the College of Engineering, to be selected by the President and Professors in that College.

Mr. L. C. Bateman, of the *Lewiston Journal*, offers a prize of ten dollars for the best essay on Dairy Bacteriology, by any student in any agricultural course.

Hon E. B. Winslow, of Portland, offers a cash prize of ten dollars to

be awarded for the highest scoring butter, made and exhibited by any person who has taken the dairy course at the University of Maine. The butter is to be shown at the annual meeting of the Maine Dairy Association.

The American Pharmaceutical Association Prize, free membership for one year in the Association, is awarded by the Faculty, to the member of the senior class in Pharmacy who has the best record in his college course.

The Gilbert M. Cowell Scholarships, two scholarships of thirty dollars each, given by a member of the class of 1908, to be awarded to two students in the four years Agricultural courses under the following conditions: These scholarships to be awarded to students who have completed the first or second years work in the College of Agriculture. One-half of each prize is to be placed to the credit of the student on his term bill at the beginning of each semester of the following year. The scholarships are to be awarded to students who are in need of financial assistance, who are making the most satisfactory college record, and who have not been registered in any other course in the University. The selection of the students is to be made by the President and Faculty of the College of Agriculture.

ADMISSION

General Requirements.—Applicants for admission must pass the required examinations, or present satisfactory certificates of fitness, and file with the Treasurer a bond for $150 signed by two bondsmen, as security for the payment of term bills. A cash deposit covering the bills of one semester will be accepted in place of a bond. In the College of Law the fees must be paid in advance, and no bond or deposit is required. The University admits men and women, both residents of Maine and non-residents.

Admission to Advanced Standing.—Candidates for advanced standing are examined in the preparatory studies, and in those previously pursued by the classes they wish to enter, or in other equivalent studies. A rank of 80 per cent. must be attained in order to pass any course in advance. Certificates from approval schools are accepted for the preparatory work; but certificates are not accepted for any part of the college work, unless such work has been done in a college. Graduates of a college of equivalent standing who wish to enter a technical course are admitted to the junior class without examination, provided their course has covered a sufficient amount of work in mathematics, physics, and chemistry.

Special Recommendations.—A good preparation in algebra and geometry is most important for those who expect to enter engineering courses.

The schools should give a part of the work in algebra and geometry, or a review of these subjects, during the last year.

Students preparing for the classical courses should devote especial attention to Latin composition, Roman history, and Latin pronunciation according to the Roman method.

Special Students.—Persons not candidates for a degree, who wish to take special studies, may be permitted to do so, if, upon examination, they give satisfactory evidence that they are prepared to take the desired studies. This privilege is intended for students of unusual maturity or previous advancement in particular subjects, not for those who are incompetent to pursue a regular course.

No examinations are required for admission to the special and extension courses in agriculture.

The terms of admission to the College of Law are stated under the proper heading.

Admission by Examinations.

Entrance examinations are held at Orono, beginning four days before the opening of the fall semester, and on the Wednesday, Thursday, Friday and Saturday preceding Commencement. To save expense to candidates, examination papers will be sent to any satisfactory person who will consent to conduct examinations on the days appointed in June. Papers will not be sent at any other time. The questions are to be submitted under the usual restrictions of a written examination, and the answers returned to the University accompanied by the endorsement of the examiner. Applications for such examinations must be made out on blanks to be obtained from the Secretary of the Faculty. Candidates for admission by examination, particularly those examined at Orono in September, should present statements from their Principals regarding their fitness to take the examinations, and to undertake college work. The examinations set by the College Entrance Examination Board will be accepted by the University. A candidate who wishes to be examined on part of his work in advance of the year in which he proposes to enter the University may receive credit for such examination, provided he offers not less than one-half of his preparatory work. It is urged that candidates avail themselves of this privilege so far as possible. Examinations on subjects which are to be continued in college should not be taken more than one year in advance.

Admission by Certificate

Certificates for admission to the freshman class without examination are accepted only from graduates of schools approved by the New England College Entrance Certificate Board (except in the case of

schools outside of New England). A list of approved schools will be sent upon application. They will not be accepted for non-graduates except in extraordinary cases, and then only provided the candidate is expressly recommended for admission by the Principal of the school from which he comes. Certificates must be made out on blanks furnished by the University.

Certificates from schools approved by the above-mentioned Board will be accepted at any of the institutions co-operating to maintain it. Any Superintendent or Principal desiring to have a school under his charge placed upon the approved list should apply before April 1st to the Secretary of the Board, Professor Nathaniel F. Davis, 159 Brown St., Providence, R. I.

ENTRANCE REQUIREMENTS

The requirements for admission are those adopted by the Maine Association of Colleges and Preparatory Schools.

To gain admission to any of the courses leading to the degrees of B. A. or B. S., 29 points must be offered by the candidate, according to the following schedules (to count 2 points, a subject must be pursued for one school year, with five recitation periods, of at least 45 minutes each, a week):

For the B. A. Courses

Required Subjects

College Entrance English	counts	6 points
Latin	"	8 "
Algebra	"	4 "
Plane Geometry	"	2 "
Roman History	"	1 point

Optional Subjects (8 Points to be Chosen)

(If Greek is not taken, French or German must be; and if Greek is taken, Greek History must be taken also. Not less than four points of any foreign language will be accepted, except under special conditions.)

Each year of Greek	counts	2 points
" " French	"	2 "
" " German	"	2 "
Chemistry (including note-book)	"	2 "
Physics (including note-book)	"	2 "
Solid Geometry	"	1 point
Greek History	"	1 "
English "	"	1 "
American History and Civil Government	"	1 "

FOR THE B. S. COURSES

(Engineering, Agriculture, Chemistry, Forestry, and all other courses not leading to the B. A. degree)

Required Subjects

College Entrance English	counts 6 points
Algebra	" 4 "
Plane Geometry	" 2 "
Solid Geometry (College of Technology and Forestry Course)	counts 1 point
	13

Optional Subjects (16 or 17 Points to be Chosen)

(Of these, two years of one modern language, one year of science, and one year of history must be taken. Candidates entering a B. S. course and offering four years of Latin may complete their entrance credits without a modern language, but must take at least four credits in one modern language in college.)

Each year of French	counts 2 points
" " German	" 2 "
" " Latin	" 2 "
" " Greek	" 2 "
Advanced Mathematics (Algebra, and Plane and Spherical Trigonometry)	" 2 "
* Mechanical Drawing (for technical courses)	" 1 point
* Manual Training (for technical courses)	" 1 "
Chemistry (including note-books)	" 2 points
Physics (including note-book)	" 2 "
Physiography	counts 1 point or 2 "
Biology (including note-book)	counts 2 "
Botany (including note-book)	" 2 "
Zoölogy (including note-book)	" 2 "
Physiology	" 1 point
Roman History	" 1 "
Greek History	" 1 "
English History	" 1 "
American History and Civil Government	" 1 "

* Graduates from high schools giving a full manual training course may receive credit for mechanical drawing, manual training, and free-hand drawing on the basis of one credit for five forty-five minute periods per week for one year in one subject.

Candidates for the SHORT COURSE IN PHARMACY (two years) are examined on *Elementary Subjects;* Descriptive Geography, Arithmetic, English Grammar, Physiology; *History,* United States; *Mathematics,* Algebra through simple equations of the first degree. Graduates of high schools will be admitted upon recommendation of the Principal.

REQUIREMENTS IN DETAIL

The following statement shows in detail the requirements in each subject.

LANGUAGE

ENGLISH.—Inasmuch as the examination in English is designed quite as much to test the candidate's ability to express himself well in his mother tongue as to test his knowledge of the books prescribed, the student is urgently advised to pursue a thorough course in English composition, in which at least a part of the subjects written upon are from his own observation and experience. He is further urged to cultivate, in all his writing, habits of correctness in spelling, grammar, sentence structure, punctuation, and paragraphing. The examiner will regard mere knowledge of the books as less important than the ability to write good English.

Grammar. The usual school course.

Reading and Practice. The candidate is expected to read intelligently all the books prescribed. He should read them as he reads other books; he is expected to have only a general knowledge of their substance, but to have freshly in mind their most important parts. To test his knowledge and his power of clear and accurate expression, he will be required to write one or two paragraphs on each of several topics set before him on the examination paper. In place of this test the candidate may present an exercise book, certified by his instructor, containing compositions or other written work done in connection with the reading of the books.

In 1909 it will be based upon: Shakespeare's Macbeth and The Merchant of Venice; The Sir Roger de Coverly Papers in The Spectator; Irving's Life of Goldsmith; Coleridge's The Ancient Mariner; Scott's Ivanhoe and the Lady of the Lake; Tennyson's Gareth and Lynette, Lancelot and Elaine, and The Passing of Arthur; Lowell's The Vision of Sir Launfal; George Eliot's Silas Marner.

Study and Practice. This part of the examination presupposes a careful study of the works named below. The examination will be upon subject matter, form, and structure; and will also test the candidate's ability to express his knowledge with clearness and accuracy.

In 1909 it will be based upon: Shakespeare's Julius Cæsar; Milton's L'Allegro, Il Penseroso, Comus, and Lycidas; Burke's Speech on Con-

ciliation with America; Macaulay's Essay on Milton and Life of Johnson.

FRENCH:—The admission requirements in elementary and advanced French are, as they have been for some years, those recommended by the Modern Language Association of America.

I. ELEMENTARY FRENCH

At the end of the second year the pupil should be able to pronounce French accurately, to read at sight easy French prose, to put into French simple English sentences taken from the language of everyday life, or based upon a portion of the French text read, and to answer questions on the rudiments of the grammar as defined below.

The first year's work should comprise: (1) careful drill in pronunciation; (2) the rudiments of grammar, including the inflection of the regular and the more common irregular verbs, the plural of nouns, the inflection of adjectives, participles, and pronouns; the use of personal pronouns, common adverbs, prepositions, and conjunctions; order of words in the sentence, and elementary rules of syntax; (3) abundant easy exercises, designed not only to fix in memory the forms and principles of grammar, but also to cultivate readiness in reproducing natural forms of expression; (4) the reading of 100 to 175 duodecimo pages of graduated texts, with constant practice in translating into French easy variations of the sentences read (the teacher giving the English), and in reproducing from memory sentences previously read; (5) writing French from dictation.

The second year's work should comprise: (1) the reading of 250 to 400 pages of easy modern prose in the form of stories, plays, or historical or biographic sketches; (2) constant practice, as in the previous year, in translating into French easy variations upon the texts read; (3) frequent abstracts, sometimes oral and sometimes written, of portions of the text already read; (4) writing French from dictation; (5) continued drill upon the rudiments of grammar, with constant application in the construction of sentences; (6) mastery of the forms and use of pronouns, pronominal adjectives, of all but the rare irregular verb forms, and of the simpler uses of the conditional and subjunctive.

Suitable texts for the second year are: About, *Le roi des montagnes;* Bruno, *Le tour de la France;* Daudet, easier short tales; De la Bédollière, *La Mère Michel et sou chat;* Erckmann-Chatrian's stories; Foa, *Contes biographiques* and *Le petit Robinson de Paris;* Foncin, *Le pays de France;* Labiche and Martin, *La poudre aux yeux* and *Le voyage de M. Perrichon;* Legouvé and Labiche, *La cigale chez les fourmis;* Malot, *Sans famille;* Mairet, *La tâche du petit Pierre;* Mérimée, *Colomba;* extracts from Michelet; Sarcey, *Le siège de Paris;* Verne's stories.

II. ADVANCED FRENCH

At the end of the third year the pupil should be able to read at sight ordinary French prose or simple poetry, to translate into French a connected passage of English based on the text read, and to answer questions involving a more thorough knowledge of syntax than is expected in the elementary course.

This should comprise the reading of 400 to 600 pages of French of ordinary difficulty, a portion to be in the dramatic form; constant practice in giving French paraphrases, abstracts or reproductions from memory of selected portions of the matter read; the study of a grammar of moderate completeness; writing from dictation.

Suitable texts are: About's stories; Augier and Sandeau, *Le Gendre de M. Poirier;* Béranger's poems; Corneille, *Le Cid* and *Horace;* Coppée's poems; Daudet, *La belle Nivernaise;* La Brète, *Mon oncle et mon curé;* Madame de Sévigné's letters; Hugo, *Hernani* and *La Chute;* Labiche's plays; Loti, *Pêcheur d'Islande;* Mignet's historical writings; Molière, *L'avare* and *Le bourgeois gentilhomme;* Racine, *Athalie, Andromaque,* and *Esther;* George Sand's plays and stories, Sandeau, *Mademoiselle de la Seiglière;* Scribe's plays; Thierry; *Récits des temps mérovingiens;* Thiers, *L'expédition de Bonaparte en Egypte;* Vigny, *La canne de jonc;* Voltaire's historical writings.

At the end of the fourth year the pupil should be able to read at sight, with the help of a vocabulary of special or technical expressions, difficult French not earlier than that of the seventeenth century; to write in French a short essay on some simple subject connected with the works read; to put into French a passage of easy English prose, and to carry on a simple conversation in French.

This should comprise the reading of from 600 to 1,000 pages of standand French, classical and modern, only difficult passages being explained in the class; the writing of numerous short themes in French; the study of syntax.

Suitable reading matter will be: Beaumarchais's *Barbier de Séville;* Corneille's dramas; the elder Dumas's prose writings; the younger Dumas's *La Question d'argent;* Hugo's *Ruy Blas,* lyrics, and prose writings; La Fontaine's fables; Lamartine's *Graziella;* Marivaux's plays; Molière's plays; Musset's plays and poems; Pellissier's *Mouvement littéraire au XIX siècle*; Renan's *Souvenirs d'enfance et de jeunesse;* Rousseau's writings; Sainte-Beuve's essays; Taine's *Origines de la France contemporaine;* Voltaire's writings; selections from Zola, Maupassant, and Balzac.

GERMAN.—The admission requirements in elementary and advanced German are, as they have been for some years, those recommended by the Modern Languages Association of America.

I. ELEMENTARY GERMAN

The first year's work should comprise: (1) careful drill upon pronunciation; (2) memorizing and frequent repetition of easy colloquial sentences; (3) drill upon the rudiments of grammar, that is, upon the inflection of the articles, of such nouns as belong to the language of everyday life, of adjectives, pronouns, weak verbs, and the more usual strong verbs; also in the use of the more common prepositions, the simpler uses of the modal auxiliaries, and the elementary rules of syntax and word order; (4) abundant easy exercises designed not only to fix in mind the forms and principles of grammar, but also to cultivate readiness in reproducing natural forms of expression; (5) the reading of 75 to 100 pages of graduated texts from a reader, with constant practice in translating into German easy variations upon sentences selected from the reading lesson (the teacher giving the English), and in reproducing from memory sentences previously read.

The second year's work should comprise: (1) the reading of 150 to 200 pages of literature in the form of easy stories and plays; (2) accompanying practice, as before, in translating into German easy variations upon the matter read, also in the off-hand reproduction, sometimes orally and sometimes in writing, of the substance of short and easy selected passages; (3) continued drill in the rudiments of grammar, to enable the pupil, first, to use his knowledge with facility in forming sentences, and second, to state his knowledge correctly in the technical language of grammar.

Stories suitable for the elementary course can be selected from the following list: Andersen, *Märchen* and *Bilderbuch ohne Bilder;* Arnold, *Fritz auf Ferien;* Baumbach, *Die Nonna* and *Der Schwiegersohn;* Gerstäcker, *Germelshausen;* Heyse, *L'Arrabbiata, Das Mädchen von Treppi,* and *Anfang und Ende;* Hillern, *Höher als die Kirche;* Jensen, *Die braune Erica;* Leander, *Träumereien* and *Kleine Geschichten;* Seidel, *Märchen,* Stökl *Unter dem Christbaum;* Storm, *Immensee* and *Geschichten aus der Tonne;* Zschokke, *der zerbrochene Krug.*

The best shorter plays available are: Benedix, *Der Prozess, Der Weiberfeind,* and *Günstige Vorzeichen;* Elz, *Er ist nicht eifersüchtig;* Wichert, *An der Majorsecke;* Wilhelmi, *Einer muss heiraten.* Only one of these plays need be read, and the narrative style should predominate. A good selection of reading matter for the second year would be Andersen, *Märchen,* or *Bilderbuch,* or Leander, *Träumereien,* to the extent of about forty pages. Afterward, such a story as *Das kalte Herz,* or *Der zerbrochene Krug;* then *Höher als die Kirche,* or

Immensee; next a good story by Heyse, Baumbach, or Seidel; last *Der Prozess.*

II. ADVANCED GERMAN

The work should comprise, in addition to the elementary course, the reading of about 400 pages of moderately difficult prose and poetry, with constant practice in giving, sometimes orally and sometimes in writing paraphrases, abstracts, or reproductions from memory of selected portions of the matter read; also grammatical drill in the less usual strong verbs, the use of articles, cases, auxiliaries of all kinds, tenses and modes (with especial reference to the infinitive and subjunctive), and likewise in word order and word formation. To do this work two school years are usually required.

Suitable reading matter for the third year can be selected from such works as the following: Ebner-Eschenbach, *Die Freiherren von Gemperlein;* Freytag, *Die Journalisten* and *Bilder aus der deutschen Vergangenheit,* for example, *Karl der Grosse, Aus den Kreuzzügen, Doktor Luther, Aus dem Staat Friedrichs des Grossen;* Fouqué, *Undine;* Gerstäcker, *Irrfahrten;* Goethe, *Hermann und Dorothea* and *Iphigenie;* Heine's poems and *Reisebilder;* Hoffman, *Historische Erzählungen;* Lessing, *Minna von Barnhelm;* Meyer, *Gustav Adolfs Page;* Moser, *Der Bibliothekar;* Riehl, *Novellen,* for example, *Burg Neideck, Der Fluch der Schönheit, Der stumme Ratsherr, Das Spielmannskind;* Rosegger, *Waldheimat;* Schiller, *Der Neffe als Onkel, Der Geisterseher, Wilhelm Tell, Die Jungfrau von Orleans, Das Lied von der Glocke, Balladen;* Scheffel, *Der Trompter von Säkkingen;* Uhland's poems; Wildenbruch, *Das edle Blut.* A good selection would be: (1) one of Riehl's novelettes; (2) one of Freytag's "pictures"; (3) part of *Undine* or *Der Geisterseher;* (4) a short course of reading in lyrics and ballads; (5) a classical play by Schiller, Lessing, or Goethe.

LATIN.—The grammar, including prosody; Cæsar's Gallic War, books I-IV; Cicero's four orations against Catiline, and those for Archias and for the Manilian Law; Vergil's Æneid, books I-VI, and the equivalent from Vergil or Ovid of an additional book; the sight translation of Latin passages of moderate difficulty; the translation into Latin of simple English sentences, and of easy narrative passages based on the prose authors read. For the last a vocabulary of less usual words will be furnished. Equivalent readings will be accepted for those prescribed.

GREEK.—The grammar, including prosody; Xenophon's Anabasis, books I-IV; Homer's Iliad, books I-III; the sight translation of easy passages from Xenophon; the translation into Greek of easy passages based on the required books of the Anabasis. For the last a vocabulary

of less usual words will be furnished. Equivalent readings will be accepted in place of those prescribed.

History

Greek History.—History of Greece, to the capture of Corinth, 146 B. C. Myers, Morey, or Botsford.

Roman History.—A knowledge of Roman history, down to the death of Marcus Aurelius, such as may be obtained from Allen's Short History of the Roman People, or from Myers's Rome: Its Rise and Fall, or from Morey's Outlines of Roman History.

English History.—A knowledge such as may be obtained from Montgomery, Coman and Kendall, Terry, or Cheyney's History of England.

United States History and Civil Government.—A knowledge such as may be obtained from Fiske, Hart, Montgomery, or McLaughlin's History of the United States.

Mathematics

Algebra.—The elements, equations of the first degree, radicals, the theory of exponents, quadratic equations, ratio and proportion, arithmetical and geometrical progression, the binomial theorem. The preparation in algebra should include, in addition to the mastery of the principal topics in one of the standard elementary text-books, drill with a more advanced text-book or with some standard exercise book. Candidates cannot safely give to algebra less than the two full years called for in the algebra requirements, unless their preparation in arithmetic has been exceptionally thorough. Candidates for the short course in pharmacy will be examined on no topics beyond simple equations of the first degree.

Plane Geometry.—The usual school course. The requirement in plane geometry and solid geometry is covered by the syllabus of plane and solid geometry issued by the Association of Mathematical Teachers in New England. This syllabus is recommended to the attention of teachers. Numerical exercises, original propositions, and the neat and careful construction of figures should not be neglected. The examination will include original propositions for demonstration or construction.

Solid Geometry.—See statement above under plane geometry. The examination will be planned to test the candidate's ability to apply the theorems to the computation of surfaces and volumes, as well as his readiness in demonstration. Much attention should be given to numerical exercises and strict accuracy should be insisted upon.

Sciences

* Chemistry.—The necessary ground is covered by the following text-books: Fisher, Remsen, Roscoe (inorganic part), Shepard, Storer, and Lindsay Williams.

Physical Geography (Physiography).—A satisfactory preparation may be obtained from Appleton's Physical Geography.

* Physics.—The work usually covered in one year in a good fitting school.

* Biology.—This may consist of a continuous course for one year dealing with the problems of general biology, including the study of the structure, functions, and habits of both plants and animals; a course for one year in botany alone; a course for one year in zoölogy alone; or a course for one half year in human physiology. The human physiology may be arranged to form a part of the general biology, or of the zoölogy, but in such cases it must be treated as an integral part of the subject under consideration.

---

* The work in these sciences must include certified note-books exhibiting the results of experimental work performed by the student. In physics forty exercises are required and in chemistry fifty exercises. These note-books should be presented at the examination.

REQUIREMENTS FOR GRADUATION

The college year is divided equally into a fall semester and a spring semester. Five recitation hours a week of successful work for one semester entitle a student to one credit. The minimum regular work for a semester in the College of Arts and Sciences is fourteen hours a week (exclusive of physical training and military science), leading to two and eight-tenths credits. In the other Colleges the minimum is seventeen hours a week (exclusive of physical training and military science), leading to three and two-fifths credits. Six credits represent the minimum requirement for a degree. In making up the quota of studies, laboratory work, and other studies not requiring preparation, count as half time, unless otherwise specified. Such studies are marked with a star (*) or dagger (†) in the detailed description of courses of instruction.

Except in the College of Law, the Short Pharmacy Course, and the School Course in Agriculture, candidates for graduation are required to complete a four years' course of study by securing twenty-five or thirty credits, according to the course chosen.

DEPARTMENTS OF INSTRUCTION

Note:—The prefix of a star (*) before the time designated for a course usually indicates that three hours of actual work are required to obtain credit for one hour, while a dagger (†) indicates that two hours are required to obtain this credit. In certain cases two and one-half hours' work give credit for one hour. This system presupposes that one hour of recitation work requires two hours of preparation.

AGRONOMY

Professor Hurd; Professor McClintock; Professor Waid

1. Soils.—Lectures and recitations beginning with the classification of and fundamental principles underlying the science of Agriculture; the nature, origin, formation, and classification of soils; the relation of soils to plants, water, heat, gases, etc.; the chemical elements in soils; factors determining soil fertility; soil inoculation; the conservation of soil moisture; the adaptability of crops to different kinds of soils; the objects and benefits of crop rotation; the improvement of unproductive land, the conditions requiring, necessity for, advantages, and methods of drainage; irrigation. *Two hours a week.* Fall semester.

2. Soil Physics.—A course taken in connection with Agronomy 1, consisting of a study of the different soils under field conditions; soil surveying and mapping; the collecting and sampling of soils for laboratory work. This laboratory course is designed to prepare the student to better understand the different methods of treatment of soils and the effect of these methods upon moisture, texture, aeration, fertility, and production. The work comprises the determination of such constants as specific gravity, water-holding capacity, evaporation and capillary power of various types of soils, and the mechanical analysis of soils. † *Two hours a week.* Fall semester.

3. Agricultural Engineering and Farm Mechanics.—

(a) *Farm surveying and Drainage.* The plotting of farms and the measurement of land; leveling for drains, estimating size of tile required, cost of drain, etc.; the making of roads, with practice in the construction of roads on the college farm.

(b) *Farm Mechanics and Farm Machinery.* A study of the simpler laws of mechanics used in operating farm implements; the principles of draft, the handling in the field, the taking apart and the putting together of the different classes of farm implements in possession of the department; the relative merits of wind, gasoline, denatured alcohol, steam, and electricity, as sources of power on the farm.

(c) *Farm Management.* A study of different forms and types of farming; the keeping of farm accounts; the planning of a season's work; the management of men and teams; and estimated cost of different farming operations.

(d) *Rural Architecture.* The planning, designing, location, and construction of farm buildings, including water supply, sewage, etc. † *Four hours a week.* Fall semester.

4. Manures and Fertilizers.—A study of the value of stable manure in successful crop production; its chemical composition, preservation, best methods of storing, and time and manner of applying on the land; the source, chemical composition, and comparative value of chemicals used as fertilizers; the working out of fertilizer formulæ suited to the needs of different soils and special crops; the importance of lime in agriculture, its physical and chemical effect on different soils, best forms to buy, when to apply, and the amount to use. Practice in home mixing fertilizers and field tests is given students each year on the college farm. *Two hours a week.* Spring semester.

5. Field Crops.—Lectures and recitation work on the history, distribution, uses, chief characteristics, and adaptability of the principal farm crops; the best methods of producing them, including crop rotations, preparation of the land, fertilizing and seeding; a study and treatment of the injurious insects and diseases affecting them, and the harvesting, marketing, and storing of crops. *Two hours a week.* Fall semester.

5a. Laboratory Course in Field Crops.—To be taken with Agronomy 5. † *Two hours a week.* Fall semester.

6. Advanced Agronomy.—Elective advanced work for those who have completed courses Agronomy 1 to Agronomy 5a inclusive. Lectures on plant breeding as applied to farm crops, farm management, and soil management. Special study is given to Experiment Station literature, methods, and work. Each student elects and carries on some line of original investigation and research. *Two hours a week.* Fall semester.

6a. Laboratory Advanced Agronomy.—A course to be taken with and supplementing Agronomy 6. † *Two hours a week.* Fall semester.

7. A continuation of course Agronomy 6. *Two hours a week.* Spring semester.

8. General Agriculture.—A history of agriculture from the earliest times, including that of the Jews, Egyptians, and Romans, to the present day; the beginning of British agriculture, and the development of modern agriculture with especial reference to that of England, Germany, France, and other foreign countries; the agriculture of the United States, its influence on social conditions, its relation to the State and Nation; the importance of our leading products, and their effect on the world's commercial life; the agriculture of different sections; the development of plant and animal life; the evolution of farm machinery and progress in agricultural education. Lectures supplemented by illustrative material and lantern slides. Elective and open to all students of the University. *One hour a week.* Spring semester.

9. Seminary.—A study of current agricultural literature and topics, assigned readings from which abstracts and reports are to be given before the class. Elective. † *Two hours a week.* Spring semester.

10. School Gardening.—A course for those taking the teachers' course in agriculture. It consists of planting seed and propagating plants in the greenhouses in preparation for the garden work; and the laying out, planting, and caring for a plot of land arranged as a school garden. * *Three hours a week.* Spring semester.

ANIMAL INDUSTRY

Professor Campbell

1. Animal Breeding.—A study of the market and breed types of dairy cattle, beef cattle and sheep; their history, development, breed characteristics and economic values. The work is given by lectures and text-books. *Two hours a week.* Spring semester.

2. Live Stock Judging.—Practice in the use of score cards and judging, handling and management of dairy cattle, beef cattle and sheep. This course is taken in conjunction with Animal Industry 1. † *Two hours a week.* Spring semester.

3. Animal Breeding.—A study of the market and breed types of swine and horses, their history, development, breed characteristics and economic values. Lectures and recitations on the principles of breeding. *Two hours a week.* Fall semester.

4. Live Stock Judging.—Practice in the use of score cards, and judging, handling and management of swine and horses. This course is taken in conjunction with Animal Industry 3. † *Two hours a week.* Fall semester.

5. Animal Feeding.—Food requirements of different kinds of animals; composition of foods and the nutrients furnished by them; feeding formulas; calculating rations; valuation of foods; pasturing, soiling and methods of feeding. *Two hours a week.* Fall semester.

6. Dairying.—A study of the Babcock test; the determination of acidity and use of lactometer. Given by lectures, text-book and practice in dairy laboratory. † *Two hours a week* Fall semester.

7. Dairying.—Lectures and recitations upon the composition and formation of milk; its production and aeration, pasteurization, separation, manufacture into butter, and marketing. *Two hours a week.* Spring semester.

8. Laboratory Dairying.—Practice in handling and testing milk and cream, for butter fat, acidity and soils; ripening cream; making butter and operating dairy machinery. This must be in conjunction with or preceded by Animal Industry 6 and Animal Industry 7. * *Seven hours a week for six weeks.* Spring semester.

9. Advanced Animal Feeding.—This course is devoted to the methods and practices of successful feeders in the production of milk, meat, and the rearing of horses. Elective for those who have completed Animal Industry 5. *Two hours a week.* Fall semester.

10. Advanced Dairying.—This course is intended for those who desire to follow some line of dairying. It will deal with such problems as the handling of milk for the city trade, certified milk plants, and those problems pertaining to the creamery. Elective for those who have completed Animal Industry 6, 7, and 8. *Two hours a week.* Fall semester.

11. Advanced Animal Breeding.—Lectures upon the formation of flocks, herds, etc.; a study of pedigrees, records, and the practices of successful breeders. Elective for those who have completed Animal Industry 1 to 4, inclusive. *Two hours a week.* Spring semester.

12. Advanced Live Stock Judging.—This course is intended for those who desire more practice in the judging of live stock than is given in Animal Industry 2 and Animal Industry 4. It will include score card work and comparative judging. Elective for those who have completed Animal Industry 1 to 4, inclusive. † *Two hours a week.* Spring semester.

ART

Professor Huddilston offers certain courses in art which are described in connection with the department of Greek.

BACTERIOLOGY AND VETERINARY SCIENCE

Professor Russell

1. Bacteriology.—A laboratory course in general bacteriology. Open to all students. The work includes the preparation of the usual culture media and the study of the morphological and biological characteristics of typical bacteria. Some outside reading will be required. This course may be taken alone or in connection with Bacteriology 2. †*Six hours a week.* Spring semester.

2. Bacteriology.—A lecture course open to all students. Should be elected by students taking Bacteriology 1 as well as by students who cannot take a laboratory course. Subjects considered will include history of bacteriology, classification and biological characteristics of bacteria, bacteria in air, water, soil, and dairy products, the relation of bacteria to health and disease, immunity. *One hour a week.* Spring semester.

3. Bacteriology.—A laboratory course in which students will study bacteria of water, air, soil, and dairy products; or pathogeric bacteria. Bacteriology 1 is a prerequisite. † *Six hours a week.* Fall semester.

4. Bacteriology.—This is a laboratory course for students who desire to pursue some particular line of bacteriological investigation. Only open to students who have done considerable work in bacteriology. The kind of work and the time will be arranged to suit individual students.

1. Veterinary Science.—A laboratory course in normal animal histology. This course is designed for students preparing for the study of human or veterinary medicine and for agricultural students specializing in animal industry. The work will consist of a microscopical study of the anatomical elements of the animal body and their various combinations in tissues and organs. Books of reference will be studied in connection with the laboratory work. † *Four hours a week.* Fall semester.

2. Veterinary Science.—A combined lecture and laboratory course dealing with the anatomy and physiology of our domestic animals and their treatment to preserve and restore health. *Three hours a week.* Spring semester.

3. Veterinary Science.—A continuation of Veterinary Science 2. *Two hours per week.* Fall semester.

4. Veterinary Science.—A clinic open to all students studying veterinary science. *One hour a week.* Fall and spring semester.

5. Veterinary Science.—Veterinary materia medica and pharmacy. *Two hours a week.* Fall semester.

BIBLIOGRAPHY

Professor Jones

1. Bibliography.—Origin of the alphabet; development of writing; inscriptions; manuscripts; invention of printing; early printed books; modern bookmaking; bookbinding and the care of books; library processes and aids; public documents; periodicals; libraries, ancient and modern. A lecture course, with collateral reading and reference work. *One hour a week.* Spring semester.

Three lectures are given on The Library and Its Use; Classification and the Catalog; and Reference Books and Their Use. Required of all freshmen. Fall semester.

BIOLOGICAL AND AGRICULTURAL CHEMISTRY

Professor Merrill

1. Biological Chemistry.—Lectures and recitations on the composition of the plant; the source and assimilation of plant food; the composition of the animal body and of food materials; the chemical changes involved in the digestion and assimilation of food; and the chemical

processes and methods of investigation by which these subjects are studied. *Five hours a week.* Fall semester.

2. Laboratory Biological Chemistry.—A study of the proteids, fats, and carbohydrates; the digestive enzymes; blood and other tissues of the animal body; bile, milk, and other secretions. A continuation of the preceding course. † *Six hours a week.* Spring semester.

1. Agricultural Chemistry.—This course includes a study of the origin and composition of soils; the source and composition of fertilizing materials; and the chemistry of milk and other dairy products. *Five hours a week.* Spring semester.

2. Agricultural Analysis.—A course in the qualitative and quantitative analysis of fodders, fertilizers, milk, butter and other dairy products. The course is designed for students desiring to take up experiment station work. Open to students who have completed the courses Chemistry 1, 2, 3, 4, 7, 8, 14, 15, 16. †*Ten hours a week.* Spring semester.

1. Geology.—A study of the earth's history and development, with especial attention to structural and physiographical geology. *Three hours a week.* Fall semester.

2. Economic Geology.—An elementary course in applied geology. The course will include a general survey of our mineral resources; and a study of rocks and their uses as building stone, as road material, and as sources of lime and cement. *Two hours a week.* Fall semester.

BIOLOGY

Professor Drew; Professor Chrysler; Mr. Conser; Miss Wallace

The course in General Biology forms the basis for work in both Zoölogy and Botany. After the completion of this course, students may register for courses in either branch of the subject.

1. General Biology.—This course is devoted to the study of the general principles governing the activities of living things, both plants and animals, such as nutrition, growth, physiological activities, specilization in structure and the reasons for it, relations to surroundings, etc. It is open to all students. Recitation, *two hours a week;* laboratory, † *two hours a week.* Fall semester.

2. Organic Evolution.—Some of the more important facts on which the theory is based are presented for consideration, and subjects for individual reading and essays are assigned. Open to all students. Recitation, *one hour a week.* Spring semester of odd years.

Zoology

1. General Zoölogy (*Invertebrate Animals*).—Representatives of the invertebrate groups of animals are studied in the laboratory, class room, and field, where attention is given to their habits, comparative anatomy, and to some extent to their embryology and classification. This course, together with course 2, which is a continuation, serves to give a general knowledge of the structure, adaptations, and relationship of animals that is essential to a thorough understanding of more advanced work. General Biology is required as a preparation. Recitation, *two hours a week;* laboratory, † *three hours a week.* Spring semester.

2. General Zoölogy (*Vertebrate Animals*).—A continuation of course 1. Types of the Vertebrata are studied and their structures compared. Careful dissections are made of representatives of the higher classes of animals, beginning with a fish and ending with a mammal. It must be preceded by General Biology and should be preceded by course 1. Recitation, *two hours a week;* laboratory, † *four hours a week.* Fall semester.

3. Animal Histology.—The microscopic structure of the higher animals. It consists of the comparative study of cells, the structure of tissues, and the methods of preparing them for microscopic study. Students thus become familiar with hardening, embedding, sectioning, staining, and mounting, and to some extent with injecting blood vessels for the microscopic study of the vascular supply of organs. Course 2 is required as a preparation for this course. Recitation, *two hours a week;* laboratory, † *four hours a week.* Spring semester.

4. Physiology.—Special attention is given to the physiological activities of the human body. The course includes enough anatomy to render the physiological discussions intelligible and enough hygiene to serve as a guide for the intelligent care of the body. Open to all students. Recitation, *two hours a week.* Fall semester.

5. Advanced Physiology.—Intended for those who already have an elementary knowledge of general biology and physiology. This course deals with the functions of the organs of the body and is accompanied

by laboratory work to illustrate their activities. It must be preceded by General Biology and by elementary Physiology. Recitation, *three hours a week;* laboratory, † *four hours a week.* Spring semester.

6. Embryology.—This course is intended to instruct students in the fundamental facts of the development of vertebrates. It will include lectures on the comparative embryology of vertebrates and laboratory work on the frog, fish and chick, and to some extent on the pig. Courses 1, 2, and 3 are required as a preparation. Recitation, *two hours a week*; laboratory, † *two hours a week.* Fall semester.

7. Mammalogy.—This course deals with the habits, relationship and geographical distribution of members of the group. Special attention is given to their adaptations for getting food and for escaping their enemies. Open to all students. Recitation, *two hours a week.* Fall semester.

8. Ornithology.—This course deals with the habits, relationship, and geographical distribution of birds. Special attention is given to their adaptations for getting food and for escaping their enemies and to the economic importance of the birds of the state. Open to all students. Recitation, *two hours a week.* Spring semester.

9. Advanced Zoölogy.—This course offers an opportunity for special zoölogical work along lines best suited to the future plans of the student. It may consist of field work, laboratory work, or reading, or a combination of all three. In general each student is given a problem for investigation and encouraged to devise methods for its solution. *The time varies and the work may be continued a number of semesters.* Fall and spring semesters.

10. Entomology.—This course opens with the study of the anatomy and development of insects, after which typical species of the orders are studied with reference to their structure, habits, life-histories, and adaptations. Due attention is given to the economic problems. General Biology is required as a preparation and course 1 should precede this course. Recitation, *two hours a week;* laboratory, † *four hours a week.* Spring semester.

11. Forest Zoölogy.—This course deals with the animals that are of economic importance in forests. A portion of the time is given to the study of economic problems with which mammals and birds are con-

cerned and the remainder to the study of the habits, life-histories, and methods of control of injurious and beneficial forest insects. Recitation, *two hours a week.* Fall semester.

Botany

1. General Botany.—*Phanerogams.*—The structure and functions of the organs of the higher plants; relation of the plant to its environment; identification and classification of the plants of this vicinity, studied in the laboratory and in the field. This course must be preceded by General Biology. Recitation, *two hours a week;* laboratory, † *four hours a week.* Spring semester.

2. General Botany.—*Cryptogams.*—The structure and life habits of type forms of the algæ, fungi, mosses and ferns; the relation of the classes to each other and to the phanerogams. This course must be preceded by General Biology and may profitably be preceded by Botany 1. Recitation, *two hours a week;* laboratory, † *four hours a week.* Fall semester.

3. Plant Histology.—The microscopic structure of the higher plants; the cell; the various tissues; the root, stem, leaf and spore-bearing organs, the adaptation of plants to external conditions, considered from the standpoint of structure; killing, staining and mounting of plant tissues. This course must be preceded by Botany 1. Recitation, *two hours a week;* laboratory, † *four hours a week.* Fall semester.

4. Plant Physiology.—The plant is considered from the standpoint of its activities; absorption and transport of raw material; manufacture, transport and storage of food; growth; movement in response to stimuli. This course must be preceded by Botany 1, and may with advantage follow Botany 2 and 3. Recitations, *two hours a week;* laboratory, † *four hours a week.* Spring semester.

5. Advanced Botany.—This course offers an opportunity for special work in botany along lines best suited to the future plans of the student. It may consist of laboratory work, field work, or reading, or a combination of all three. *The time varies and the work may be continued a number of semesters.* Fall and spring semesters.

6. Elementary Botany.—Studies in the structure and functions of the organs of plants. Agents of pollination, and the distribution of seeds and fruits. Exercises in plant analysis and the identification of species

in the field. Open to students who have had neither preparatory botany nor Biology 1. Recitations, *one hour a week;* laboratory, † *four hours a week.* Spring semester.

7. Pharmaceutical Histology.—Exercises on the use of the microscope; the magnification of objects, and microscopic measurements. A study of cells and tissues, and food products found in them; followed by exercises in the detection of the common adulterants of familiar drugs. Open to students who have taken course 6. Recitations, *one hour a week;* laboratory, † *four hours a week.* Fall semester.

8. Agricultural Botany.—This course deals with the special botany of farm crops and forage plants; the distribution, habits of growth, and eradication of weeds; the purity and viability of seeds. Some systematic study of Maine weeds and grasses is required but greater attention is given to the structure and life processes of the plants under consideration for economic ends. Botany 1 is a prerequisite. Recitations, *two hours a week;* field or laboratory work, † *two hours a week.* Fall semester.

9. Plant Pathology.—The diseases of plants, especially those caused by fungi; destruction of timber by fungi; methods of combatting plant diseases. This course must be preceded by Botany 1 and 2 and may profitably be preceded by Botany 3. Recitations, *one hour a week;* laboratory, † *two hours a week.* Spring semester of odd years.

10. Forest Botany.—This course consists of a systematic study of trees and shrubs, particular attention being given to these of the eastern states, and the identification of these in summer and winter aspects. Special attention is given to the forest trees of commercial value and their geographical distribution. Field work in the identification of local species and preparation of a forest herbarium is required in the autumn and early winter months. This course must be preceded by Botany 1. Recitation, *two hours a week;* laboratory, † *four hous a week.* Fall semester.

11. Forest Botany.—In this course the systematic study of Botany 10 is continued. Attention is given in the laboratory work to the microscopic structures of the vegetative and reproductive parts of typical gymnosperms and angiosperms. Recitations, *two hours a week;* laboratory, † *four hours a week.* Spring semester.

Summer Term (Mr. Eames)

1. Field Botany.—This course will deal with the kinds, habits, and habitats of plants about the University, including short excursions to several outlying regions for collecting and identifying species in field and forest. Attention will also be given to methods of pollination, modes of migration, association and mutual benefits of flowers and insects, and other factors of environment such as light, heat, soil, water, gravity, and the effects of other plants. There will be a few lectures, some reference reading, and a small amount of laboratory work confined mostly to rainy days.

2. Laboratory Botany.—A course designed primarily for teachers and dealing with laboratory methods. Exercises will be given in collecting and preserving material of different kinds in different ways. Considerable time will be devoted to life, based on the phenomena of absorption and movement, of experimental work on the physics and physiology of plant solutions, transpiration, respiration, carbon assimilation, and reproduction. Attention will also be given to the teaching of botany in secondary schools.

CHEMISTRY

Professor Aubert; Mr. Seymour; Mr. Clayton; Mr. Washburn; Mr. Durgin

1. General Chemistry.—Recitations and lectures on the general principles of chemistry, illustrated by charts, experiments, etc. To obtain credit for this course, it must be accompanied by course 3, and followed by courses 2 and 4, unless a special excuse is obtained. The text-book is Remsen's College Chemistry. *Two hours a week.* Fall semester.

2. General Chemistry.—A continuation of course 1. *Three hours a week.* Spring semester.

3. Laboratory Chemistry.—Practical work to accompany course 1. The text-book is Keller and Smith's Laboratory, Remsen's Chemical Experiments. † *Two hours a week.* Fall semester.

4. Laboratory Chemistry.—A continuation of course 3 to accompany course 2, with elementary qualitative analysis for those who advance far enough. †*Two hours a week.* Spring semester.

5. Advanced Inorganic Chemistry.—Lectures and recitations, illustrated by specimens. The text-book is Jones's Principles of Inorganic Chemistry. No credit is given unless course 6 is taken, except by special arrangement. Open to students who have taken courses 1, 2, 3, and 4. *Two hours a week.* Fall semester.

6. Advanced Inogganic Chemistry.—A continuation of course 5. *Three hours a week.* Fall semester.

7. Elementary Organic Chemistry.—The marsh gas series. Lectures and recitations, illustrated by specimens. The text-book is Remsen's Organic Chemistry. This course must be followed by course 8, and preceded by courses 1, 2, 3, 4, 5, and 6, except for those especially admitted. *Three hours a week.* Fall semester.

8. Elementary Organic Chemistry.—The unsaturated compounds and the benzene series. A continuation of course 7. *Two hours a week.* Spring semester.

12. Chemical Preparations.—The preparation and purification of typical organic and inorganic substances. Open to students who have taken courses 1, 2, 3, 4, 5, 6, 7, and 8. Text-book, Aubert's Organic and Inorganic Preparations. *Five hours a week.* Fall semester.

13. Descriptive Mineralogy.—The text-book is Moses and Parson's Elements of Mineralogy. *Three hours a week.* Spring semester.

14. Qualitative Analysis.—A laboratory study of the chief elements and their derivatives with a view to a clear understanding of their properties. Supplemented by class room work. The text used is Medicus's Qualitative Analysis. Open to students who have taken courses 1, 2, 3, and 4, except for students in the short pharmacy course. It is generally advised that course 5 be taken with this course, and it must be followed by course 15. *Not less than † six hours per week, except by special arrangement.* Fall semester.

15. Qualitative Analysis.—A continuation of course 14, with the application of analytical methods to the determination of unknown substances of increasing complexity. Elementary analysis by means of the spectroscope is given. Course 6 is usually an accompanying study, except for students in the short pharmacy course. *Time, the same as course 14.* Spring semester.

16. Quantitative Analysis.—Gravimetric determinations. The text is Appleton's Quantitative Chemical Analysis. For satisfactory preparation, the student should have taken courses 1, 2, 3, 4, 14, and 15; and he should add courses 18 and 19. *Not less than †eight hours per week, except by special arrangement.*

18. Quantitative Analysis.—Analysis of complex alloys, minerals, etc. The text used is Clowes and Coleman's Quantitative Chemical Analysis. Open to students who have taken course 16 and its requirements. *Not less than †eight hours per week, unless by special arrangement.* Fall semester.

19. Volumetric Analysis and Assaying.—Acidimetry, alkalimetry, oxydimetry; gold and silver assaying. The text-book used is Schmiff's Essentials of Volumetric Analysis. *Time* and general requirements the same as for course 18.

20. Agricultural Analysis.—The analysis of fodders, fertilizers, milk, and other products. The methods are those recommended by the Association of Official Agricultural Chemists. Except in special cases, the *time* and requirements are the same as for course 18.

21. Toxicology and Urinalysis.—The determination of the more common poisons; the analysis of urine. Text, Aubert's Urinalysis and Toxicology. *Time,* and general requirements, the same as for course 18.

22. Thesis Work.—The thesis must embody the result of original work in analysis or research. Open to students who have taken courses 1, 2, 3, 4, 5, 6, 7, 8, 12, 14, 15, 16, 18, 19, 20, 21, 23, 24, and 28. † *Fifteen hours a week for eleven weeks.* Spring semester.

23. Organic Chemistry.—An advanced course. Text-book, Joannis's Cours de Chimie, Vol. III. *Three hours a week.* Fall semester.

24a. Industrial Chemistry.—General processes of technical chemistry, and selected topics, including the principal manufactured products of special interest. Lectures and recitations. The text-books is Thorp's Outlines of Industrial Chemistry. Open to students who have completed courses 5, 6, 7, and 8. *Two hours a week.* Fall semester.

24b. Industrial Chemistry.—A continuation of course 24a. *Two hours a week.* Spring semester.

25a. Technical Analysis.—An advanced course in analysis of ores and industrial products. Open to students who have completed courses 16, 18, 19, and their requirements. †*Five hours a week.* Fall semester.

25b. Technical Analysis.—Organic technical products, and advanced mineral analysis. † *Five hours a week.* Spring semester.

26. Physical Chemical Methods.—The determination of molecular weights by the vapor density, boiling point, and freezing point methods; the use of the refractometer and the polariscope. † *Five hours a week.* Spring semester.

28. Dyeing.—The practical application of dyes to cotton, wool, and silk. † *Fifteen hours a week for two weeks.* Spring semester.

29. Metallurgy.—The chemistry of the metals. Occurrence and methods of extraction. Properties of the metals and their alloys. *Two hours per week.* Fall semester.

31. Chemical Equations.—Principles governing chemical reaction; their application to equations; advanced equation writing; oxidation and reduction. The text-book is Prescott and Johnson's Qualitative Chemical Analysis. *Two hours a week.* Spring semester.

32. Physical Chemistry.—This course is devoted to the study of the general principles of physical chemistry. Lectures and recitations. Open to students who have completed. Ch. 6. *Two hours a week.* Spring semester of even years.

Summer Term (Mr. Burgess)

1. Preparatory Elementary Chemistry, descriptive and experimental, lectures and recitations. Laboratory course covering the work required for entrance to the University.

2. General Inorganic Chemistry, corresponding to work of the freshman year.

3. Advanced courses adapted to the needs of the students registering for them. A Special Teachers' Course will be given, covering methods of teaching chemistry, construction of apparatus, and experimentation, if a sufficient number elect.

CIVIL ENGINEERING

Professor Boardman; Professor Brown; Mr. Bean; Mr. Johnstone; Mr. Steward

1a. Plane Surveying.—A course on the general principles of plane surveying; instruments, their adjustments and uses; the variation of the magnetic needle, and the determination of the true north; direct leveling; land survey computations. The text-book used is Breed and Hosmer's The Principles and Practice of Surveying, Vol. I. *Three hours a week. Last twelve weeks.* Fall semester.

1b. Plane Surveying.—A course similar to 1a, given to students in the mechanical and electrical engineering courses. *Two hours a week.* Fall semester.

2a. Field Work in Surveying.—The use of the chain, compass, transit, and level. This course is given before the student has received class room instruction, and is designed to make him familiar with the uses of the instruments, such as running lines, turning angles, reading verniers and rods, etc. **Six hours a week. First six weeks.* Fall semester.

2b. Plotting.—This course consists chiefly of map drawing from field notes, by the different methods in common use. **Four hours a week. First twelve weeks.* Spring semester.

2c. Field Work in Surveying.—A continuation of course 2a. This course consists of original surveys, problem work, adjustment of instruments, note keeping, etc. The text-book used is Pence and Ketchum's Surveying Manual. **Six hours a week. Last six weeks.* Spring semester.

3a. Railroad Curves.—The theory of railroad curves, switches and turnouts. The text-book used is Allen's Railroad Curves and Earthwork, together with Field and Office Tables, by the same author. *Three hours a week. First twelve weeks.* Spring semester.

3b. Earthwork.—A continuation of course 3a on the methods of setting slope stakes and of calculating earthwork. *Three hours a week. First six weeks.* Fall semester.

4a. Railroad Field Work.—This course consists of practice in running in railroad curves. A general application of the theories of course 3a. † *Six hours a week. Last six weeks.* Spring semester.

4b. Railroad Field Work.—The survey of a railroad about three miles in length. The preliminary and location surveys are made, including running in the curves, obtaining the topography, establishing the grade, and setting the slope stakes. * *Six hours a week. First nine weeks.* Fall semester.

4c. Railroad Office Work.—The office work of mapping the notes taken in course 4b, including the calculation of the earthwork. * *Six hours a week. Last nine weeks.* Fall semester.

5. Highway Engineering.—The location, construction, and improvement of country roads under different conditions of soil, climate, and traffic. The construction and maintenance of the different pavements on city streets. Lectures and recitations. The text-book used is Judson's City Roads and Pavements. *Three hours a week. Last Twelve weeks.* Fall semester.

6. Drawing.—This course includes topographical drawing, lettering and tracing; stereotomy, giving the application of the methods of descriptive geometry to the preparation of drawings for arches, retaining walls, abutments, bridge piers, etc. * *Six hours a week.* Spring semester.

8. Sanitary Engineering.—Sewerage systems; drainage and sewerage of towns; sewage disposal; sewage treatment; water purification; sanitation and the public health. The text-book used is Folwell's Sewerage. Required of students electing Option 1. *Two hours a week.* Spring semester.

9a. Advanced Surveying.—This course consists of lectures and recitations on the theory of base line measurement, triangulation, precise leveling, topographical surveying, and the use of the plane table, and is a preparation for course 9b. The text-book is Breed and Hosmer's The Principles and Practice of Surveying, Vol. II. *One hour a week.* Spring semester.

9b. Advanced Surveying.—This course consists of the practical application in the field of the principles given in course 9a. The work

is given during the two weeks following commencement, and counts as 2-5 credit.

10. Hydraulics.—Fundamental data; hydrostatics; theoretical hydraulics; instruments and observations; theoretical and actual flow through orifices, weirs, tubes, pipes, and conduits; dynamic pressure of water. The text-book used in this course is Merriman's Treatise on Hydraulics. *Three hours a week.* Spring semester.

11. Hydraulic Field Work.—The measurement of the flow of rivers is illustrated by the use of the current meter, and various forms of floats. Trips are made to the United States Geological Survey gaging station, located on the Penobscot river between Howland and West Enfield, where discharge measurements are made, where, at this time of year, a discharge of from 4,000 to 10,000 cubic feet per second is usually found. The data thus obtained is used together with that obtained from the Survey to plot the rating curve, etc. The measurements taken are reported to the Survey. The charge for this course is $5.00. † *Four hours a week.* Fall semester.

12. Structures.—A continuation of course 21. The theory of stresses in framed structures, including the plate girder, bridge trusses, and roof trusses; the principles of designing. The object of this course is to train the student in the application of the principles of mechanics to the design of structures. *Three hours a week.* Fall semester.

13a. Structures.—A continuation of course 12. This course includes a study of the higher types of structures such as drawbridges, cantilever bridges, suspension bridges, arches, and steel buildings. The text-book used in Merriman and Jacoby's Roofs and Bridges. Vol. IV. *Three hours a week.* Spring semester.

13b. Graphic Statics.—This course consists of class and drawing room work in the graphical determination of shear and bending moment, and the analysis of bridge and roof trusses by the graphical method. *Two hours a week.* Spring semester.

14. Designing.—This course takes up the design for some of the common types of steel structures, and the preparation of the shop drawings. † *Twelve hours a week.* Fall semester.

15. Designing.—A continuation of course 14. † *Six hours a week.* Spring semester.

16. Hydraulic Engineering.—Rainfall, evaporation, and stream flow. The development and utilization of water power. The development of the modern turbine. This course is given by lectures and recitations, the text-books used being Hoyt and Grover's River Discharge, and Merriman's Hydraulics. Required of students electing Option 1. *Two hours a week.* Fall semester.

17. Hydraulic Engineering.—A continuation of course 16. *Two hours a week.* Spring semester.

19. Railroad Engineering.—A course discussing the economics of railroad location and construction; estimate of traffic; operating expenses; rolling-stock; track; distance; curvature; grades. The text-book used is Webb's Economics of Railroad Construction. Required of students electing Option 2. *Two hours a week.* Spring semester.

20. Masonry Construction.—A course including the discussion of building stone, cements and their tests, mortar, concrete, piles, foundations, pneumatic caissons, open caissons, bridge piers, and abutments. Reinforced concrete. Lectures and recitations. The text-books used are Baker's Treatise on Masonry Construction and Maurer and Turneaure's Principles of Reinforced Concrete Construction. *Two hours a week.* Fall semester.

21. Structures.—The theory of the simple beam; loads; reactions; vertical shear; shear; bending moment; influence lines. The object of this course is to give the student a drill in finding vertical shear and bending moment under different systems of loadings, and to familiarize him with the use of steel hand books, the moment diagram, different tables, and the slide rule. The text-book used is Grover and Boardman's Notes on Beams and Simple Framed Structures. *Two hours a week.* Spring semester.

22. Foundations.—Building stones; manufacture of cement; tests of cement. Mortar; concrete, both plain and reinforced. This is a course of lectures given to students in the mechanical and electrical engineering courses. *One hour a week.* Fall semester.

23. Hydraulics.—A short course which includes the main principles given in course 10. Given to students in the mechanical and electrical engineering courses. The text-book used is the same as that used in course 10. *Two hours a week.* Fall semester.

24. Railroad Engineering.—A map reconnaissance for a railroad about ten to fifteen miles in length, where the theories of course 19 are applied. A profile is made, grades established and drainage areas calculated. Culverts, rails, switch points, frogs, and ties are designed, and the layout of a railroad yard made. Required of students electing Option 2. † *Six hours a week.* Spring semester.

25a. Railroad Engineering.—Lectures and recitations on the methods and materials of railroad construction. Roadbed; track; street crossings; signals and interlocking; track work and maintenance. The design and operation of yards and terminals. The text-book used is Tratman's Railway Track and Track Work. Required of students electing Option 2. *Two hours a week.* Fall semester.

25b. Railroad Engineering.—A continuation of 25a. *One hour a week.* Spring semester.

26. Cement Testing.—This course consists of laboratory work for the purpose of making the regulation commercial tests upon different samples of cement. A laboratory fee sufficient to cover the cost of materials used is charged. This course is given in conjunction with Mechanical Engineering 25, Testing, and is required of students in mechanical engineering in the fall semester and of students in civil engineering in the spring semester. *The time varies.*

ECONOMICS AND SOCIOLOGY

Professor Sprague.

1a. Political Economy.—An introductory course dealing with the general principles and problems of modern economics, production, distribution, and consumption, values, commerce, labor problems, and various other topics in this field of study. Required of junior engineers and of all who take course 1b. Open to others by special permission. Text-book and general discussions. *Two hours a week.* Fall semester.

1b. Advanced Political Economy.—This course is devoted to a more exhaustive study of special subjects in the economic field, labor unions, methods of arbitration, tariff history and problems, trusts and their regulations, railroads, insurance, business organizations, immigration, exhaustion of natural resources, and other special topics. This course is open to all who have had or are taking course 1a. Lectures, readings, papers, and discussions. *Three hours a week.* Fall semester.

2a. Money and Banking.—An introductory course to the study of money, banking, and finance. The history of money and the principal forms of currency used in the leading countries. The principles and workings of the various banking systems of America and foreign countries. The monetary history of the United States. Required of junior engineers and all who take course 2b. Open to others only by special permission. Text-book and lectures. *Two hours a week.* Spring semester.

2b. Public Finance.—This course is devoted to an extended study of public financial problems. Taxation and various systems for the collection of public revenue in America and Europe will be studied in detail. Financial crises and depressions, their history and causes, will receive considerable attention. Open to all who have taken or are taking course 1a, to others only by special permission. *Three hours a week.* Spring semester.

3a. Sociology.—This course is devoted to the study of the evolution of society and social institutions, the family, religious organisms, the state and property, and such current social problems as divorce, criminality, and prison reform, poverty and its relief, etc. General sociological theory will occupy the last weeks of the semester. This course is open to those who have taken course 1a, and to others only by special permission. Students planning to take this course are advised to take course 3b the preceding year, although it would be possible to take both courses in the same year. Lectures, readings, and discussions. *Three hours a week.* Fall semester.

3b. Anthropology.—The evolutionary origin and history of man. Characteristics of primitive man. Departure from the animal status and beginnings of civilization. Development of industries, arts, and sciences. Growth of language, warfare, migrations, and social institutions. Open to all students. Students planning to specialize in economics are advised to take this course before taking course 3a. Text-book and lectures. *Two hours a week.* Given in the fall term of even years.

4a. Social Reforms.—Socialism, communism, and communistic settlements, anarchy, nihilism, European systems of workingmen's insurance, trade union, relief associations, and other efforts providing against old age and misfortune. Lectures and readings. Open to those who have

taken course 3a and to others by special permission. *Three hours a week.* Spring semester.

4b. Ethnology.—Principles underlying racial distinctions. The origin and characteristics of races or general ethnic groups. The great migrations and changes worked by new environments and conflicts. Modern racial problems in America, Europe, and Asia. Open to those who have taken courses 3a or 3b. Lectures, reading, and discussions. *Two hours a week.* Given in the spring semester of odd years.

5. International Law.—The principles, history, and prominent "cases" of international law take up most of the course. Considerable attention will be given to American diplomacy and the most important foreign treaties. Text-book, lectures, and discussions. *Two hours a week.* Spring semester.

6. Business Law. This course aims to acquaint the student with those legal principles and practices which are essential to a business life and with which every active citizen should be familiar; rights, contracts, agency, partnerships, and corporations, bailments, guaranty, insurance, etc. Lectures with readings. Students electing this course are generally advised to take it in the senior year. *Three hours a week.* Spring semester.

7a. Governments of Europe.—A brief review of the ancient types of government followed by a detailed comparative study of modern European national governments. Political parties and current national problems will receive some attention. Lecture course with readings. *Two hours a week.* Fall semester.

7b. Municipal Government.—A study of the systems of government and special problems of the leading European cities as compared with the same in American cities. New movements for civic and social betterment to meet the necessities of American urban life. Lectures and readings. *One hour a week.* Given in the fall semester of even years.

8. American Government.—The principles and interpretation of the Federal Constitution, history of political parties, organization of state governments and the working of the Federal Congress. Lectures and readings. *Two hours a week.* Spring semester.

9. Democracy, Its History and Institutions.—The class will study the beginnings and development of early forms of Democracy and trace the great world movement down through the ages to the present. The greater part of the time will be given to a study of the current democratic movements in Europe, Australasia, and the American States. Lectures and readings. *Two hours a week.* Given in the spring semester of even years.

10. Economic History.—The leading facts of the economic history of Europe and America, introducing the student to the fundamental causes which lie behind much of narrative history, and examining the material and industrial resources which make the wealth of nations. Lectures and readings. Open to all students. Recommended for students planning to take other economics courses. *Two hours a week.* Given in the fall semester of odd years.

EDUCATION

Professor Davidson

1. History of Education.—From the Greeks to Rousseau. Ideals of education at each stage of development; their sources, and modification through the intellectual life and convictions of the people; organization of instruction and the results obtained. *Three hours a week.* Fall semester.

2. History of Education.—Course 1 continued,—the development of education traced down to the present time. *Three hours a week.* Spring semester.

3. Organization and Administration.—Growth of present conceptions of education in the United States; organization of education in the different states; also in Germany, France, and England; comparative study of education in three typical states—Massachusetts, New York, and California—and special study of the school system of Maine. *Three hours a week.* Fall semester.

4. Organization and Administration Continued.—Problems within the state: town schools and city schools; duties of all officers; certification; of teachers and supervision; financial support; defects and excellences of present organization. Problems within the school: powers and duties of the teachers; programs and courses of study; government, and student activities; grading and backward pupils; class and individual instruction. *Three hours a week.* Spring semester.

5. Foundations of Education.—Avenues through which knowledge reaches the child and methods of effective approach. Training in analysis, synthesis, and reasoning; inculcation of habits of attention, discrimination, judgment; methods of imparting instruction by topical recitation, question, and exposition; the use of examination, note-book, library, and laboratory methods. *Three hours a week.* Fall semester.

6. Special Methodology.—All high school teachers, principals, and superintendents should be specialists in some high school subject. After conference with his major instructor, a course of study, reading and practice will be mapped out for each student in the methods most applicable in his specialty. *Three hours a week.* Spring semester. Open to those only who have taken Course 5.

7. School Hygiene.—Habits for healthful living; hygienic conditions in home and school; ventilation and sanitation; habits of study in school and at home; physical examination and training; nutrition and school luncheons; construction of school buildings. *Two hours a week.* Spring semester. Open to advanced and graduate students, only.

8. Child Study.—The physical child. Order of development of the mental powers; adolescence; adaptation of studies to the child. *Two hours a week.* Spring semester. Open to those only who have taken Course 5.

9. Applications of Educational Theory.—For advanced students only. Research and experiment in the application of educational theory in our public schools. Among the problems that students investigate are:

1. The introduction of motor activities in the first four grades.
2. The value of percentage grading in estimating acquired power and knowledge in the higher grades.
3. The causes that lead pupils to leave school in or before the completion of the work of the grammar grades.
4. The value of repeating the year when pupils of the grammar grades fail of promotion, etc. *Two hours a week.* Fall semester.

Summer Term

The following courses are offered for election; the three elected by the greatest number of students will be given:

1. Organization and Administration.—Studies in school law. Comparative studies of school organization in Maine, in other states, and in Germany, France, and England. School administration.

Note.—The lectures on school administration will be given by Hon. Payson Smith, State Superintendent of Public Schools.

2. Foundations of Education.—Studies in the nervous and mental organization of man with special reference to his capacity for education. The central nervous system, the brain, and the special senses will be studied with reference to their functions and contributions to education. Speech and the higher mental processes will be considered to establish a scientific procedure in instruction.

3. Child Study.—Studies of the child from birth to maturity. The physical child. The order of development of the mental powers; adolescence; adaptation of studies to the child.

Note.—Either No. 2 or No. 3 will be given, but not both, unless the registration for each is above ten.

4. English Grammar.—In this course special study will be given to those constructions in prose text that are omitted in the handbooks of grammar. The course will also include a discussion of the different parts of speech and of the syntactic relations, to discover principles of classification where grammars disagree. The functions of prepositions, the relations expressed by infinitives and noun clauses, with their analogues in noun and phrase constructions will be examined, and also the genesis of noun and adverbial clauses. Advanced works for reference will be provided, but all should bring for purposes of comparison such handbooks of grammar as they possess.

5. A seminar meeting for consultation on methods of teaching English in the grades and secondary schools will be held once a week, if desired, but no credit will be given for attendance at such meeting.

ELECTRICAL ENGINEERING

Professor Ganong; Professor Wittig

1a. Elements of Electrical Engineering.—This course traces the development of electrical engineering from the practical application of laws studied in physics. The work is taken up by lectures, text-book, and problems. Required of juniors in electrical engineering. *Two hours a week.* Fall semester.

1b. Elements of Electrical Engineering.—A continuation of course 1a, showing the application of fundamental principles to the construction of electrical machinery and to general engineering problems. Required of juniors in electrical engineering. *Three hours a week.* Spring semester.

2b. Laboratory Work.—Electrical measurements, and the operation and testing of direct current generators and motors. This course illustrates the practical application of the work given in courses 1a and 1b. Required of juniors in electrical engineering. The charge for this course is $2.00. *Two hours a week.* Spring semester.

3a. Elements of Alternating Current Circuits.—A study of the conditions which arise in connection with the introduction of variable and alternating electric pressures, and the production of such pressures, measurements and calculations for the same. Required of seniors in electrical engineering. *Three hours a week.* Fall semester.

3b. Alternating Current Machinery.—A continuation of course 3a, taking up the application of the fundamental elements of alternating currents to the design, construction, and operation of apparatus and machinery; the study of polyphase apparatus in the generation, transmission, distribution, and utilization of power. Required of seniors in electrical engineering. *Four hours a week for the first nine weeks.* Spring semester.

4a. Electrical Development.—A course on the design, construction, and cost of electro-magnets and clutches, electric heating apparatus, direct current generators and motors, and the general features of the design of alternating current machinery. The study of the insulation problem to meet the requirements of high electric pressures is also taken up, together with the discussion of modern electrical development. Required of seniors in electrical engineering. *Three hours a week.* Fall semester.

4b. Reference Work.—Special subjects are assigned to each student, which he investigates with the aid of library books and current literature, and he presents the results of such investigation to the class. Also the discussion of the design and construction of electrical instruments and special forms of apparatus of interest in scientific development, and of possible practical application. Required of seniors in electrical engineering. *One hour a week.* Spring semester.

5a. Design of Electrical Machinery.—This course is given in the drawing room, and is the practical application of the work in course 4a. Calculations are made for electro-magnetic devices, and for direct current generators, involving a knowledge of the fundamental electrical principles of design, the principles of mechanical design, cost of materials

and cost of labor, and the use of the student's judgment to fit particular circumstances and financial conditions. Required of seniors in electrical engineering. *Four hours a week.* Fall semester.

5b. Design of Direct and Alternating Current Machinery.—A continuation of couse 5a. Drawing room work. Required of seniors in electrical engineering. *Four hours a week for thirteen weeks.* Spring semester.

6a. Laboratory Work.—A continuation of course 2b, taking up the testing of direct current apparatus and machinery, and alternating current measurements; investigation of power plant equipments and electric lighting. Required of seniors in electrical engineering. The charge for this course is $3.00. *Four hours a week.* Fall semester.

6b. Laboratory Work.—A course showing the practical application of the work done in courses 3a and 3b, and continuing the laboratory work of course 6a, including the operating, testing, and experimental work with alternating current instruments, generators, motors, transformers, and rotary converters; and polyphase power measurements. Required of seniors in electrical engineering. The charge for this course is $3.00. *Four hours a week.* Spring semester.

7b. Electrical Engineering.—A course in general engineering applications and practical problems, such as will be met with after the student leaves college, applying all the work and training of the course and the technical ability of the student. Required of seniors in electrical engineering. *Four hours a week, last nine weeks.* Spring semester.

8b. Electrical Engineering Practice.—A course given for the expansion of laboratory work into the construction of laboratory apparatus and development of original ideas of the student; also for testing, repairing, or adjusting commercial electric plants. This course is designed and will be expanded to give the student an opportunity to apply his technical training and ability to actual engineering problems and difficulties. Required of seniors in electrical engineering. *Sixty-four hours during the senior year.*

9a. Thesis Work.—The designing of electrical apparatus or original research work in which the student is particularly interested; and a clear, complete report of what has been accomplished. The organization of the work and the carrying out of the same is left almost entirely to the student, and is a measure of his energy and ability as an engineer. Required of seniors in electrical engineering. *Fall semester and through the senior year, as arranged for.*

10a. Electrical Development and Application.—A course dealing with the fundamental electrical principles and their application to the production, distribution, and utilization of power from the standpoint of a mechanical engineer. Required of seniors in mechanical engineering. *Three hours a week.* Fall semester.

10b. Alternating Current Development and Application.—An elective course for seniors in mechanical engineering, which continues the work taken up in course 10a. The fundamental elements of alternating current measurements and calculations are studied; also the operation of alternating current generators, motors, and polyphase apparatus is treated from a mechanical engineer's point of view. *Two hours a week.* Spring semester.

11a. Laboratory Work.—For mechanical engineers. Electrical measurements, and the operating and testing of direct current generators and motors, showing the practical application of the work taken up in course 10a, and the work is arranged for the particular needs of the mechanical engineer. This course is open to chemical and civil engineering students who have previously elected one of the preliminary electrical courses. This course may be followed by the regular courses 6a and 6b, by those wishing to become familiar with alternating current machinery. Required of seniors in mechanical engineering. The charge for this course is $3.00. † *Four hours a week.* Fall semester.

12b. Electrical Transmission and Distribution of Power.—An elective course for seniors in civil engineering, taking up the elements of electrical measurement, the generation, transmission, and utilization of power; covering the electrical feature of water power development. *Two hours a week.* Spring semester.

ENGLISH

Professor Estabrooke; Professor Thompson; Professor Daggett; Mr. Prince; Mr. Pearson

Two credits in English are required for graduation. Courses 3 and 4, which are prescribed for freshmen, give 1 1-5 credits. The remaining 4-5 credit is regularly obtained by taking courses 1 and 2; but students especially interested in other courses in English may, upon consultation with the instructors, make certain substitutions (see under courses 6, 7, 17, and 18). Course 1 is regularly taken during the freshman year and course 2 during the sophomore year; however, upon sufficient grounds, either course may be postponed for one year.

1a and 1b. Public Speaking.—The purpose of this course is to give the student a practical knowledge of the fundamental principles of effective public speaking. The first term's work consists in voice training by means of practice work in classes, reading aloud for interpretation, and the acquirement of ease in pose and gesture. During the second term the training thus acquired will be applied to the delivery of model public orations, and especially to speeches of the students own composition. Special attention will be given to the correction of individual faults. Provided their other work is satisfactory, the eight students obtaining the highest grades in this course are chosen to compete in the sophomore prize declamations. During the year the sections will meet *once a week.* The assignment of sections is made by the instructor in the second week of the semester.

2a and 2b. English Composition.—This course—to be taken throughout the sophomore year—supplements the work of the freshman year by giving further practice in narrative, expository, and argumentative writing. *Monthly themes are required,* each containing from 1,000 to 1,200 words. There will be a conference on each theme.

3. English Composition and Rhetoric.—This course gives both theoretical and practical instruction. The theory is taught by class-room work based on Espenshade's Composition and Rhetoric. The practice is obtained by exercises written in the class-room, and by weekly themes. The themes are criticized in detail by the instructor, and those falling below the standard must be rewritten. In addition to the study of the text-book and the writing and rewriting of themes, certain outside reading from standard authors is required. This course is prescribed for freshmen. *Three hours a week.* Fall semester.

4. English Composition and Rhetoric.—Extended study of the forms of discourse—narration, description, exposition, and argumentation; construction of outlines, and practice in the different forms by exercises in the class-room and by weekly themes. The text-books are Cairn's Forms of Discourse and Lewis's Specimens of the Forms of Discourse. This course is prescribed for freshmen. *Three hours a week.* Spring semester.

5. Old English.—Elements of Old English grammar; reading of easy prose and poetry. Constant reference is made to the relation of old English to modern English and modern German. The text-book is Smith's Old English Grammar. *Three hours a week.* Given in the spring semester of even years.

6. English Composition and Literature.—One two-page theme a week, and occasional longer themes, in connection with the study of selections from English prose writings. Among the writings studied will be selections from Addison, Swift, Johnson, Goldsmith, and Burke. *Two hours a week.* Fall semester.

7. English Composition and Literature.—A continuation of course 6. Among the writings studied will be selections from Macaulay, Carlyle, Ruskin, Newman, Matthew Arnold, and Stevenson. *Two hours a week.* Spring semester.

Courses 6 and 7 are open to those who have taken courses 3 and 4; and students especially interested in courses 6 and 7 may, upon consultation with the instructor, substitute them for courses 1 and 2.

8. English Literature.—The text-book, Pancoast's Introduction to English Literature, is supplemented by frequent lectures, and by study in the library. A few masterpieces are studied in detail. Attention is given to historical and social conditons, and the students are required to prepare essays upon the characters and times studied. *Three hours a week.* Fall semester.

9. English Literature.—A continuation of course 8. The authors studied are chiefly Elizabethan dramatists. *Two hours a week.* Spring semester.

10. English Literature.—A continuation of course 9. Study of Elizabethan writers completed. Study of writers of the Restoration. *Two hours a week.* Fall semester.

11. American Literature.—Study of the most important American authors of the nineteenth century. The text-book is Bronson's American Literature. *Three hours a week.* Spring semester.

12. English Literature.—Study of the structure and qualities of the English novel. The text-book is Perry's Study of Prose Fiction. *Three hours a week.* Fall semester.

13. English Literature.—A continuation of course 12. In this course selections from English novelists are read critically, in order to determine the characteristic qualities of each. At least one entire work

of a selected author is carefully studied. *Two hours a week.* Spring semester.

14. American Poets.—This course is designed to make the student acquainted with the more important American poets, especially with Poe, Bryant, Longfellow, Emerson, and Lowell. The text-book is Bronson's American Literature. *Three hours a week.* Given in the spring semester.

15. Victorian Poets.—Tennyson, Browning, Rossetti, and Arnold. A study of selected poems, together with readings in the works of these poets and of contemporary poets. *Two hours a week.* Fall semester.

17. Forensic Writing.—A course in the principles of written argumentation with a view to spoken debate. Lectures and written work. Open only to those who have taken courses 3 and 4, or an equivalent. *Two hours a week.* Fall semester.

18. Oral Debate.—A course in application of the principles of argumentation to spoken debate. Lectures and class-room work. Open only to those that have taken course 17, or an equivalent. This course is not given unless elected by at least eight students. *Two hours a week.* Spring semester.

Courses 17 and 18 may be substituted for courses 1 and 2.

19. Forms of English Poetry.—The study of the foot, the line, the stanza, the ballad, the sonnet, the ode, the epic, the metrical romance, etc. *Two hours a week.* Fall semester.

20. English Romantic Poets.—A general view of the English Romantic Movement with some attention to the characteristics of the poetry that preceded this movement; a sudy of selected poems from the writings of Thomson, Collins, Gray, Cowper, and Burns. *Two hours a week.* Fall semester.

21. English Romantic Poets.—A continuation of course 20. Study of selected poems from the writings of Wordsworth, Coleridge, Scott, Byron, Shelley, and Keats. *Two hours a week.* Spring semester.

22. Advanced Public Speaking.—This course will give practical training in the principles of voice production, vocal interpretation of

literature, extempore speaking, and the various problems of platform art. *Three hours a week.* Fall semester. Open to all undergraduates.

23. Advanced Public Speaking.—A continuation of course 22. *Three hours a week.* Spring semester.

Summer Term

1. A course in preparatory English for the benefit of students who have entrance credits to make in this department.

2. English Composition and Rhetoric. The work in this course is similar to that of the fall term of the freshman year in the University. It consists of the study of text-books, discussions of principles and methods, and practice in writing. The written work, which is based largely upon the personal observations and experiences of the student, is discussed before the class in order to give practical illustration of principles and methods. Teachers will obtain from this course a familiarity with the methods of teaching English composition followed in the University, and special effort will be made to meet their needs. The text-book used will be Espenshade's Composition and Rhetoric.

3. English Prose. A study of the style and substance of selected writings from the works of English prose writers of the Nineteenth Century. Among the writers dealt with will be Macaulay, Carlyle, Ruskin, Newman, Matthew Arnold, and Stevenson. There will be frequent written reports on the reading assigned, the purpose of the reports being to give practice in writing and to encourage the student toward intelligent interpretation and appreciation of what he reads.

4. English Poetry. A careful and appreciative study of selected poems from the writing of English poets of the early part of the Nineteenth Century. Among the writers dealt with will be Wordsworth, Coleridge, Byron, Shelley, and Keats. An attempt will be made to determine the characteristic merits of the poets studied and to show the relation of these poets to the time in which they lived. Courses 3 and 4 will be given on alternate years. Students in English are requested to indicate their preference for 1909.

An additional course in Shakespeare (a careful reading of a few of the best plays) will be given, if there is sufficient demand.

FORESTRY

PROFESSOR TOWER

[NOTE.—The courses in forest botany and forest zoölogy are listed under biology.]

1. GENERAL FORESTRY.—The importance and scope of the subject; forest as a soil-former and soil-improver; relation of forest to health of a community; relation to the State; esthetic value; influence on floods; importance of forest in irrigation; geographical distribution of forests. The course is recommended for the student in economics. Open to all students. *Two hours a week.* Spring semester.

2. FARM FORESTRY.—A study of forest conditions; practical work in the woods. Methods of thinning and planting; of determining amount of wood in single trees and for a given area; discussion of log scales; measuring trees and determining their contents. For students in Agriculture, who have taken course 1. * *Three hours a week.* Fall semester.

3. FOREST MAPPING.—Making type and topographical maps using date of valuation surveys. Elective for Juniors and Seniors. Time to be arranged. Spring semester.

4. FOREST HISTORY.—The rise and development of forestry in European countries, the United States and other countries. Text-book, History of Forestry, by B. E. Fernow. *Two hours a week.* First-half of fall semester.

5. FOREST PROTECTION.—A consideration of the methods of economic protection of the forests. The European methods and conditions discussed and compared with our own. *Two hours per week.* Spring semester.

6. SILVICULTURE.—A study of the facts which concern forest growth in the relation of the tree to external influences; characteristics of the forest, and of the forest regions of the United Stats; systems of reproducing forests naturally; thinnings and improvement cuttings. To be taken in connection with course 8. Open to those who have taken Biology 10 and 11. *Two hours a week.* Fall semester.

7. SILVICULTURE.—A continuation of course 6. To be taken in connection with course 9. *Two hours a week.* Spring semester.

8. Silviculture, Field Work.—Special studies and practical work in the forest. A part of the time is devoted to the making of a forest map of 1000 to 2000 acres of forest land in the vicinity of the University. A report accompanies the map describing the condition of the tract and type of forest growth. Open to students in Forestry who have had Drawing 1 and 2. *Six hours a week.* Fall semester.

9. Silviculture, Field Work.—A continuation of course 8. Includes practice in thinning and work in planting. The student is required to make a planting plan for about 100 acres of land and prepare a map of the tract. This course should be preceded by courses 6 and 7. † *Eight hours a week.* Last half of spring semester.

10. Forest Measurements.—Practical instruction in the woods and in the office. Some recitations.

(1) Woods work.—The use of various hypsometers in ascertaining the height of standing trees; determining the contents of felled and standing trees and the volume of stands; study and use of American log scales; consideration of the methods of measurement used in the United States; study of the rate of growth of trees in diameter, height and volume.

(2) Office work.—Computing the data obtained in the woods; calculating the contents of logs in cubic feet, and the contents of trees and stands in cubic feet, cords and board feet; use of graphic methods in determining the average rate of growth in diameter, height and volume; construction of tables of rate growth, volume and yield. * *Six hours a week.* Fall semester.

11. Forest Measurements.—A continuation of course 10. * *Six hours a week.* First half of the spring semester.

12. Lumbering.—The industry considered from an economic standpoint; an account of the methods of lumbering in the different parts of the United States. In connection with this course the student is expected to spend two weeks in a lumber camp and prepare a written report on the operations of lumbering in that locality. Fall semester. Two-fifths credit is allowed for the time spent in the lumber camp and in preparing the report. Open to students taking forestry as a major subject. *Two hours a week.* First half of fall semester.

13. Forest Management.—Financial and economic considerations; the normal forest; principles and preparation of working plans. Open

to those who have taken courses 6, 7, 8, 9, 10 and 11. *Two hours a week.* First half of the spring semester.

14. Thesis Work.—The preparation of a thesis in forest management. † *Ten hours a week.* Spring semester.

15. Forest Geography.—A study of the forest distribution of the United States. The forest products of this country; the centers of production, and of manufacture and distribution. Brief consideration of the forests of other countries. *Two hours a week.* Fall semester.

GERMANIC LANGUAGES

Professor Carr; Miss Merrill

[Note.—Students who wish to be recommended by this department to teach German will take courses 5a, 5b, 8a, and 8b.]

1. Elementary German.—Joynes-Wesselhoeft German Lesson Grammar; Leander's Träumereien; Zschokke's Der zerbrochene Krug; Storm's Immensee; Grimm's Märchen, selected; Benedix's Der Prozess; elementary composition. *Five hours a week.* Fall semester.

2. Elementary German.—A continuation of course 1. *Five hours a week.* Spring semester.

1a. Elementary German.—Joynes-Wesselhoeft German Lesson Grammar; easy German texts; elementary composition. *Three hours a week.* Fall semester.

1b. Elementary German.—A continuation of course 1a. *Two hours a week.* Spring semester.

2a. German Prose.—Modern German texts, suited to the needs of engineering students; elementary composition; oral exercises. Open to students who have completed courses 1a and 1b or their equivalent. *Three hours a week.* Fall semester.

2b. German Prose.—A continuation of course 2a. *Two hours a week.* Spring semester.

3a. German Prose and Poetry.—Texts selected from the writings of nineteenth century authors. Easy assigned reading; composition; memorizing of German songs. *Three hours a week.* Fall semester.

3b. German Prose and Poetry.—A continuation of course 3a. *Two hours a week.* Spring semester.

4a. German Literature of the Eighteenth and Nineteenth Centuries.—Special attention will be devoted to the works and biographies of Lessing, Goethe, and Schiller. Kluge's Deutsche National-Literatur; composition, assigned reading and reports. *Three hours a week.*

4b. German Literature of the Eighteenth and Nineteenth Centuries.—A continuation of course 4a. *Three hours a week.*

5a. General View of German Literature.—Kluge's Deutsche National-Literatur; Thomas's German Anthology; Gudrun and Walther von der Vogelweide (both in modern German); assigned reading and weekly reports. *Three hours a week.*

5b. General View of German Literature.—A continuation of course 5a. *Three hours a week.*

6a. Intermediate German Composition and Conversation.—Bronson's Colloquial German; Lambert's Alltägliches; Krüger and Smith's German Conversation Book; collateral reading of one intermediate German text a month. *Two hours a week.* Fall semester.

6b. Intermediate German Composition and Conversation.—A continuation of course 6a. *Two hours a week.* Spring semester.

7a. Advanced German Composition and Conversation.—Vos's Materials for German Conversation; Die Tatsachen des Lebens; Kron's German Daily Life; collateral reading. *Two hours a week.* Fall semester.

7b. Advanced German Composition and Conversation.—A continuation of course 7a. *Two hours a week.* Spring semester.

8a. Middle High German.—Wright's Middle High German Primer; translation of Middle High German texts into modern German. Primarily for graduates, but open to undergraduates who elect course 4a or 5a. *Two hours a week.* Fall semester.

8b. Old High German.—Wright's Old High German Primer; Braune's Althochdeutsches Lesebuch. Primarily for graduates, but open to undergraduates who elect course 4b or 5b. *Two hours a week.* Spring semester.

9. Gothic.—Wright's Gothic Primer. Primarily for graduates. *One hour a week.* Spring semester.

11. Scientific German.—Dippold's Scientific German Reader. Open to students who have completed courses 1 and 2 or their equivalent. *Two hours a week.* Fall semester.

12. Scientific German.—German scientific texts selected from the Sammlung Göschen. A continuation of course 11. *Two hours a week.* Spring semester.

Summer Term

1. Elementary Course.—The work is that done in preparatory schools in one year, and in colleges in one half-year. Text-books: Whitney's Brief German Grammar (H. Holt & Co.); Hempl's Easiest German Reading (Ginn & Co.); and Hauff's Das kalte Herz (D. C. Heath & Co.).

2. Intermediate Course.—The work is that done in colleges in one-half of the second year. Text-books: Goethe's Sesenheim (D. C. Heath & Co.); Schiller's Wilhelm Teli (C. E. Merrill & Co.); Heine's Harzreise (Ginn & Co.); and Harris's German Composition (D. C. Heath & Co.).

3. Advanced Course.—History of German Literature. For teachers and others who have had at least two years of German. Text-books: Kluge's Deutsche National-Literatur (G. E. Stechert & Co., New York) and Max Müller's German Classics (Oxford, 1886). This course will not be given, unless the demand justifies it.

4. Scientific German.—Dippold's Scientific German Reader (Ginn & Co.). For students who have had at least one year of German, and wish to acquire a reading knowledge of easy scientific German.

GREEK

Professor Huddilston

1. Xenophon.—Hellenica, Books, I-IV. Study of syntax, and daily exercises in writing Greek. *Four hours a week.* Fall semester.

2. Homer.—Odyssey, Books VI-XII. The reading of the remaining books, in English translation, is required. Assigned readings on the history of Greek poetry, "the Homeric question," and Homeric antiquities. *Four hours a week.* Spring semester.

3. Attic Orators.—Some of the shorter orations of Demosthenes; selections from the minor Attic orators; parallel reading on the history of Greek prose literature, and the public economy and social life of Athens. *Two hours a week.* Fall semester.

4. Greek Tragedy.—Euripides's Medea and Sophocles's Antigone. The reading of several other plays in English translation is required; also, parallel reading on the history of the Greek tragic drama. *Three hours a week.* Spring semester.

5. Thucydides.—Bks. II-III. Assigned reading in Herodotus, and a comparative study of the three great historians of Greece. *Three hours a week.* Fall semester. Open to students who have taken courses 1 and 3.

6. Aristophanes.—The Clouds and the Knights; lectures and collateral reading on the development of Greek comedy. Open to students who have taken courses 2 and 4. *Two hours a week.* Spring semester.

7. Plato.—Selected dialogues. Lectures on the history of Greek philosophy with special reference to Plato and Aristotle. Open to students who have taken courses 3 and 5. *Two hours a week.* Fall semester.

8. Pindar.—The Olympian and Pythian Odes; supplementary reading on the history of Greek lyric poetry. *Two hours a week.* Spring semester.

9. Greek Fine Arts.—This course is intended to follow History 15 although it is open to students who have not taken the latter. The entire question, so far as time allows, of the development of art among the ancient Greeks will be discussed in lectures illustrated by the use

of the stereopticon and photographs. Greek sculpture as representing the largest part of the extent remains of ancient art will receive the most attention; but the survey will include architecture, and painting, and the minor art of pottery. The aim of the course will be to present a definite notion of the part art played in the intellectual life of the Greeks and the significance of this legacy to succeeding ages. *Three hours a week.* Spring semester.

11. New Testament Greek.—This course is intended for those who have no acquaintance with ancient languages, and, with course 12, is expected to give considerable facility in reading the narrative portions of the Greek Testament. It is open to all students. *Three hours a week.* Given in the fall semester of even years.

12. New Testament Greek.—A continuation of course 11. Reading of the Gospels of John and Matthew; syntax. *Three hours a week.* Given in the spring semester of add years.

13. Greek Private Life.—Lectures, illustrated with lantern slides and photographs. Assigned reading. *Two hours a week.* Given in the fall semester of even years.

14. Greek Religion.—A study of the chief divinities in ancient Greek religion. Lectures and assigned reading. Investigation of special topics by members of the class. *Two hours a week.* Given in the spring semester of odd years.

15. Greek Prose Composition.—A course in writing Greek, intended to continue the work begun in Gk 1. *One hour a week.* Spring semester.

18. Greek Prose Composition.—An advanced course consisting of the translation into Greek of narrative and rhetorical passages. *One hour a week.* Fall semester.

19. Greek Prose Composition.—A continuation of course 18. *One hour a week.* Spring semester.

For the accommodation of those students who have not presented Greek for entrance to college the two following courses in elementary Greek are offered.

20. Elementary Greek.—The declensions, conjugations; Xenophon's Anabasis, Books I-II, and daily writing of Greek based on the text. *Five hours a week.* Fall semester.

21. Xenophon and Homer.—Anabasis, Books III-IV; sight reading in Attic prose selections from Homer's Iliad. *Five hours a week.* Spring semester.

22. History of Old Testament Literature.—This course will cover the rise and development of the Bible as a piece of literature; the vicissitudes of the written and the printed texts; and the various English translations. As far as time permits the development of the Old and New Testament Cannons will be included in the work. Lectures and assigned topics. Open to all students. *One hour a week.* Fall semester.

23. History of New Testament Literature.—A continuation of course 22. Open to all students. *One hour a week.* Spring semester.

1. Italian Art.—The revival of the fine arts in Italy, with special reference to the history of painting in Tuscany and Umbria during the early Renaissance. Lectures and collateral reading. The work is illustrated by a large and growing collection of photographs and casts. *One hour a week.* Given in the fall semester of even years.

2. Italian Art.—A continuation of course 1, dealing chiefly with the masters of the high Renaissance in Florence and Rome. *One hour a week.* Given in the spring semester of odd years.

3. Italian Art.—Painting in the north of Italy, and the culmination of the Italian Renaissance in the Venetian masters. Lectures and collateral reading. *One hour a week.* Given in the fall semester of odd years.

4. Italian Art.—A continuation of course 3. *One hour a week.* Given in the spring semester of even years.

5. Architecture.—A chronological survey of the development of ancient and modern architecture with main emphasis upon the period prior to 1600 A. D. Greek and Roman architecture, their modifications in the Renaissance, the various cathedral styles, and the *chateaux* of the feudal period, will comprise a large part of the course. Lectures, outside reading, and detailed study of the reproduction in the Art Collection. Open to all students. *Two hours per week* for the year.

6. Architecture.—A continuation of course 5. *Two hours a week.* Spring semester.

HISTORY

Professor Fellows; Professor Colvin

1. Medieval History.—A general course covering the period from 395 to 1500 A. D. The disintegration of the Roman Empire; ecclesiastical institutions; feudalism; struggle between the papacy and the empire; rise of modern nations. Required of major students in history. Open to all students. *Three hours a week.* Fall semester.

2. Modern History.—Continuation of course 1 to the present time. A rapid survey of the Reformation; the absolute monarchy in France; the French Revolution; the Napoleonic era; Europe in the nineteenth century. Open to all students. *Three hours a week.* Spring semester.
Courses 1 and 2 are given in 1908-9.

3. History of England.—From early times to the beginning of the Stuart period. Especial attention is given to social and industrial conditions. Open to all students. *Three hours a week.* Fall semester.

4. History of England.—Continuation of course 3. From the beginning of the Stuart period to the present. Open to all students. *Three hours a week.* Spring semester.
Courses 3 and 4 will be given in 1909-10.

5. History of the United States.—A general course from 1848 to the present time. Open to technical students only. *Two hours a week.* Fall semester.

6. History of the United States.—The period from 1783 to the beginning of Jackson's administration. This course will begin with a brief study of Colonial history from 1750. Open to all students. *Three hours a week.* Fall semester.

7. History of the United States.—A continuation of course 6, through the Period of Reconstruction. Open to all students. *Three hours a week.* Spring semester.

[The following courses are open only to advanced students.]

8. The Renaissance and the Reformation.—The period from 1300 to 1648 A. D. *Two hours a week.*

9. The Renaissance and the Reformation.—A continuation of course 8. *Two hours a week.*

10. Modern Continental Europe.—The period from the Peace of Utrecht to 1789. *Three hours a week.*

11. Modern Continental Europe.—Period of the French Revolution and Napoleon I. *Three hours a week.*

12. Modern Continental Europe.—The period since 1815. *Three hours a week.*

13. Industrial and Social History of England.—The medieval manor, town, guild, and foreign trade; Black Death and Peasants' Rebellion; breaking up of the medieval system; expansion of England; the industrial revolution; government control in the nineteenth century; and the growth of voluntary association. *Two hours a week.*

14. Historical Construction and Criticism.—*One hour a week.*

15. Greek History.—A brief survey of the Pre-Greek nations with reference to their legacies to civilization, followed by the history of Greece from the earliest times down to the absorption of Greece by Rome. The development of political ideals, and the forces that were basal in Greek civic life and government will be kept to the front. Oman's History of Greece will be used accompanied by collateral reading and lectures. Open to all students. *Three hours per week* for the year.

Summer Term (Professor Sprague)

1. United States History. Critical periods and formative forces from the Revolution to the Civil War.

2. Modern Europe. The economic and other forces producing the civilization of Europe in modern times will be given much attention.

3. English History. A course in English History will be offered the details of which will be arranged according to the demand after the opening of the term.

4. Social Problems and Reforms. The course will be devoted to a study of the family, its history, and problems; divorce; criminality; poverty and its relief; socialism, anarchy, workingmen's insurance, and other reforms as far as time permits.

HORTICULTURE

Courses one to four inclusive are required of all students in the four years' course in the College of Agriculture. Courses five to ten inclusive are elective and open to students who have had sufficient preparation to do the work.

1. Principles of Fruit Growing.—A study of the methods of growing, harvesting, storing, and marketing the small and large fruits. *Two hours a week.* Spring semester.

2. Pomology.—A systematic study of the types and varieties of the leading groups of fruits, including practice in scoring. *Two hours a week* in classroom and † *two hours* in the laboratory. Fall semester.

3. Orchard Practice.—A classroom and laboratory study of pruning, spraying, grafting, tree planting, and other orchard operations. *One hour a week* in classroom and † *four hours* in the laboratory and orchard. Spring semester.

4. Vegetable Gardening.—A study of the principles of vegetable gardening, accompanied by practice in the actual growing of garden plants. *Two hours a week.* Spring semester.

5. Greenhouse Management.—A study of the different greenhouse crops, supplemented by practice in the regular greenhouse operations. Open to juniors and seniors. *One hour a week* in classroom and † *two hours* in the greenhouse. Fall semester.

6. Greenhouse Management and Construction.—A continuation of course 5 and including a study of the principles of greenhouse construction and heating. Open to juniors and seniors. *One hour a week* in classroom and † *two hours* in the greenhouse. Spring semester.

7. Plant Breeding.—A study of the evolution and breeding of horticultural plants. Open to seniors. *Two hours a week.* Fall semester.

8. Landscape Gardening.—A study of the principles of landscape art and of the materials used in making landscape pictures. Special attention given to the improvement of the home and school grounds. Open to seniors. *Two hours a week.* Spring semester.

9. General Horticulture.—An introductory course designed to cover the entire field of horticulture in a general way. Intended for students who desire a general knowledge of the subjct. Elective and open to all students of the University. *Three hours a week.* Fall semester.

10. Horticultural Experimentation.—Original work for those desiring to become teachers and investigators. Open to seniors and graduate students. *Time to be arranged.*

LATIN

Professor Chase

1. Livy and Composition.—Selections from Livy, History of Rome; composition, with review of Latin syntax. *Four times a week.* Fall semester.

2. Cicero and Horace.—Cicero, De Senectute; Horace, Odes and Epodes; Latin composition. *Four times a week.* Spring semester.

Courses 1 and 2 are required of candidates for the B. A. degree who elect Latin.

3. Terence and Plautus.—The Andria, Adelphoe, or Phormio of Terence; the Captivi, Trinummus, or Menaechmi of Plautus; lectures on the development of Roman comedy. *Three times a week.* Fall semester.

4. Tacitus and Cicero.—The Agricola and Germania of Tacitus; selected letters of Cicero. *Three hours a week.* Spring semester.

6. Latin Composition.—Practice in writing Latin; study of Latin syntax. *One hour a week.* Fall semester.

6. Latin Composition.—Practice in writing Latin; study of Latin rhetoric. *One hour a week.* Spring semester.

7. Pliny and Tacitus.—Selected letters of Pliny the younger; readings in the Annals of Tacitus; the Roman Empire. *Two hours a week.* Given in the fall semester of even years.

8. The Roman Elegiac Poets.—Selections from Catullus, Tibullus, Propertius, and Ovid; lectures on the elegiac poets. *Two hours a week.* Given in the spring semester of odd years.

The following may be counted toward the Master's degree

9. Roman Satire.—Selections from Ennius, Lucilius, Varro, Horace, Persius, Juvenal, Petronius. Open to students who have taken, or are taking courses 3-4, or 7-8. *Two hours a week.* Given in the fall semester of odd years.

10. Roman Satire.—A continuation of course 9. *Two hours a week.* Given in the spring semester of even years.

11. Roman Philosophy.—Lucretius (selections); Cicero (selections from the Academica, De Officiis, Tusculanæ Disputationes, De Finibus, De Natura Deorum); Seneca (De Providentia, De Vita Beata); lectures on the history and development of ancient philosophy. Open to students who have taken, or are taking, courses 3-4, or 7-8. *Two hours a week.* Given in the fall semester of even years.

12. Roman Philosophy.—A continuation of course 11. *Two hours a week.* Given in the spring semester of odd years.

13. Roman Literature.—General introduction to the subject; illustrative class-room readings; a choice of one of six courses of collateral reading of Roman authors. Open to students who have taken courses 1-4. *Three hours a week.* Given in the fall semester of even years.

14. Roman Literature.—A continuation of course 13. Three hours *a week.* Given in the spring semester of odd years.

15. Roman Rhetoric and Oratory.—Quintilian (selections from the Institutio Oratoria); Tacitus (Dialogus de Oratoribus); Cicero (selections from the Brutus, De Oratore, Orator); a study of sample orations of Cicero, and of some of the fragments of Roman oratory. Open to students who have taken courses 1-4. *Two hours a week.* Given in the fall semester of odd years.

16. Roman Rhetoric and Oratory.—A continuation of course 15. *Two hours a week.* Given in the spring semester of even years.

18. Roman Private Life.—Text-book work, supplemented by collateral reading and lectures upon some of the more important and interesting customs and institutions of Roman every-day life. Open to students who have taken courses 1-4. *One hour a week.* Given in the fall semester of odd years.

19a. The Latin Language.—A discussion of the fundamental principles of linguistic growth and change and of the relationship of Latin to other languages. Latin Phonetics. The development of inflectional forms in Latin. Lectures and recitations. *One hour a week.* Given in the fall semester of odd years.

19b. The Latin Language.—A continuation of 19a. *One hour a week.* Given in the spring semester of even years.

20. Roman Epigraphy.—The principles of the science, and the interpretation of selected inscriptions. *One hour a week.* Given in the spring semester of even years.

21. Rapid Reading of Latin.—Practice in reading without translation. Selections from various authors. Especially adapted for students expecting to teach the language. Open only to students whose major subject is Latin. *One hour a week.* Spring semester.

22. Sanskrit.—An elementary course in the classical language of India, with especial reference to the light it throws upon the history and grammar of the languages of Europe. *Two hours a week.* Given in the fall semester of 1907-8, and occasionally.

23. Sanskrit.—A continuation of course 22, with more attention to the classical literature of India. *Two hours a week.* Given in the spring semester of 1907-8, and occasionally.

24. Roman Numismatics.—Practice in the use of coins as original sources for the study of history, mythology, archaeology, etc. *One hour a week.* Given in the fall semester of even years.

SUMMER TERM

The Latin Department offers two distinctly different lines of study, intended to meet the needs of three classes of students.

1. FOR TEACHERS OF LATIN, AND FOR STUDENTS WISHING TO GAIN ENTRANCE CREDITS IN LATIN, one course will be offered in Virgil and one in Cæsar's Gallic War. In these two courses various questions connected with the teaching of Latin will be discussed, such as questions of spelling and pronunciation, of grammatical forms and inflections, of syntax, prosody, etc.; also questions of bibliography, methods of translation, history, mythology, literature, and the various aids to the elucidation of the authors studied, together with the fundamental principles of the Latin language.

2. FOR STUDENTS WHO DESIRE COLLEGE CREDITS LOOKING TO THE B. A. DEGREE. It is the plan of the department to offer a double course that shall cover the work of an entire college semester and be equivalent to that required for one college credit, and to vary this course from year to year so that a student in a few summers may complete a fairly comprehensive course of college study in Latin. For the summer of 1909 it is proposed to offer a course in Cicero's *De Sonectute* and Horace's Odes and Epodes, or a course in Tacitus' minor works. The decision will rest with the class. This will be equivalent to the work offered for the second semester of the Freshman year. We call the especial attention of secondary school teachers who have not had the advantage of complete college training in Latin to these courses, as we believe they afford an unusual opportunity to them to increase their equipment.

MATHEMATICS AND ASTRONOMY

PROFESSOR HART; PROFESSOR WILLARD; MR. MOOTS; MR. SWEET; MR. REED

Students electing Mathematics as a major subject should expect to take courses 1, 2, 4, 6, 7, 8, 11, 12, 13, 15, 19, 20 and either courses 9 and 10 or Mechanics 7 and 8. Courses 2, 4, and either 1, 19, or 6a are required of all candidates for a Bachelor's degree.

1. SOLID GEOMETRY.—Solid and spherical geometry, including original demonstrations and the solution of numerical problems. The text-book is Bush and Clarke's Solid Geometry. *Five hours a week for ten weeks.*

Spring semester. Required of all freshmen in the B. A. courses, and of those in the B. S. courses who did not offer it for admission.

2. Algebra.—A brief review of the theory of exponents, quadratic equations, and the binomial theorem; indeterminate equations; logarithms, including practice in the solution of numerical exercises; undetermined coefficients; partial fractions; exponential and logarithmic series, and the computation of logarithms; permutations and combinations; theory of equations. The text-book is Hawke's Advanced Algebra. *Five hours a week.* Fall semester, last six weeks; spring semester, first eight weeks.

4. Plane Trigonometry.—The text-book is Taylor's Trigonometry. *Five hours a week.* Fall semester, first twelve weeks.

6a. Analytic Geometry.—A study of the point, line, and circle. Open to students who have taken courses 1, 2 and 4. The text-book is Ashton's Analytic Geometry. *Five hours a week.* Spring semester, last ten weeks.

6b. Analytic Geometry.—A continuation of course 6a. Conic sections; elements of solid analytic geometry. *Five hours a week.* Fall semester, first eight weeks.

7. Calculus.—Differentiation of the elementary forms of algebraic and transcendental functions; successive differentiation; differentials; integration of the elementary forms; integration between limits. Open to students who have taken courses 1, 2, 4, 6a, and 6b. The text-book is Granville's differential and Integral Calculus. *Five hours a week.* Fall semester, last ten weeks.

8. Calculus.—A continuation of course 7. Integration as a summation; various methods of integration. Applications of differential and integral calculus. *Five hours a week.* Spring semester.

9. Descriptive Astronomy.—The text-book is supplemented by informal lectures, and illustrated by lantern slides, the Tronvelot drawing of celestial objects and work in the observatory. Open to students who have taken courses 1, 2, 4, and, preferably, Physics 1 and Physics 5. The text-book is Young's Manual of Astronomy. *Three hours a week.* Spring semester.

10. Practical Astronomy.—A course arranged to meet the needs of engineering students, and consisting mainly of problems in the conversion of time, the determination of terrestrial latitudes and longitudes, and the establishment of meridian lines. The data for these problems are taken largely from the student's own observations, and the course is intended to emphasize the necessity of careful work in the field, as well as accurate and well arranged computations. The instruments employed are the sextant, artificial horizon, portable chronometer, theodolite, and vertical circle. Open to students who have taken courses 9. 4, and 19. *Two hours of recitations or lectures and two hours of observatory work a week.* Fall semester.

11. Advanced Algebra.—Determinants and the solution of higher equations. Open to students who have taken courses 1, 2 and 4. *Three hours a week.* Spring semester.

12. Advanced Integral Calculus.—A course based upon Byerly's Integral Calculus. Open to students who have taken courses 6, 7 and 8. *Three hours a week.* Given in the fall semester of odd years.

13. Advanced Integral Calculus.—A continuation of course 12. *Two hours a week.* Given in the spring semester of even years.

15. Differential Equations.—The text-book is Murray's Differential Equations. Open to students who have taken courses 7 and 8. *Two hours a week.* Given in the spring semester of odd years.

16. Practical Astronomy.—The theory and use of the sextant, universal instrument, transit, and equatorial. Open to students who have taken courses 6, 7, 8, 9, 19, and, preferably, 10. *Three hours a week.* Given in the fall semester of odd years.

17. Practical Astronomy.—A continuation of course 16. *Three hours a week.* Given in the spring semester of even years.

19. Spherical Trigonometry.—A continuation of course 4, with additional problems and applications to spherical astronomy. *Two hours a week.* Fall semester.

20. Solid Analytic Geometry.—A course based upon C. Smith's Solid Geometry. *Three hours a week.* Given in the fall semester of even years.

Summer Term

1. High School Algebra.—A course intended for teachers in preparatory schools and covering the second year's work. Especial attention will be given to the methods of presenting this subject and those topics will be emphasized that are most important in preparation for college work. Candidates for admission to the University who are deficient in a part of their preparation in algebra are also advised to take this course.

2. Plane Geometry.—A review of the more important theorems with practice in the demonstration of original propositions and in the solution of numerical exercises. For teachers in preparatory schools and for candidates for admission who are slightly deficient in geometry.

3. Solid Geometry.—This course is offered especially for the benefit of students who intend to enter college, but who have not been able to complete the requirements in solid geometry. Bush and Clarke's Solid Geometry will probably be used as the text-book, but Phillips and Fisher's Well's, and other books will be used for reference.

4. Plane Trigonometry.—The solution of right and oblique plane triangles, and of problems in surveying, together with the use of surveying instruments. No text-book will be required for this course, but those having logarithmic tables should bring them, and also any modern text-book on trigonometry, which will be useful for reference.

5. College Algebra.—The theory of quadratic equations, the binomial theorem, and so much of the regular freshman course in algebra as time will permit. Text-book to be selected at the opening of the term.

6. Analytic Geometry.—A brief course covering the elements of this subject.

7. Differential and Integral Calculus.—A course intended for teachers in preparatory schools who wish to gain a knowledge of the elements of this subject.

8. Descriptive Astronomy.—Lectures accompanied by work in the observatory.

Note.—Five of the above courses will be given, to be determined by the number of students selecting them.

MECHANICAL ENGINEERING

Professor Jewett; Professor Curtis; Mr. Davee; Mr. Carter

1a. Woodworking.—A number of graded exercises in woodworking designed to give the student familiarity with the tools used in modern woodworking practice, and also teach him to work from dimensioned drawings. These exercises lead up to pattern-making. The pattern work consists of making complete patterns and core boxes from draw-

ings. Required of students in mechanical engineering. Charge for materials, $4.00. * *Six hours a week.* Fall semester.

1b. Woodworking.—A shorter course than 1a, arranged for students in electrical engineering. Required. Charge for materials, $4.00. * *Four hours a week.* Fall semester.

2. Forge Work.—Forging; welding; tool dressing. A set of lathe tools and cold chisels for use in machine work is made by each student. Required of students in mechanical and electrical engineering. Charge for material, $5.00. Cost of hammer, calipers and scale, about $2.50. * *Four hours a week.* Spring semester.

3. Kinematical Drawing.—This course supplements 4. The drawings are of cams and gear teeth and graphical studies of kinematic problems. Required of students in mechanical engineering. * *Three and one-half hours a week.* Fall semester.

4. Kinematics.—A study of motion in machine construction and of the elements of machines; links, gears, cams, etc. The text-book is Schwamb and Merrill's Elements of Mechanism. Required of students in mechanical and electrical engineering. *Three hours a week.* Spring semester.

5a. Machine Work.—Exercises in chipping and filing; lathe work; exercises on planer, shaper, and milling machines; making cut gears, machinists taps, etc. Required of students in mechanical engineering. Charge for materials, $5.00. *Six hours a week.* Fall semester.

5b. Machine Work.—A continuation of the machine tool work in the spring semester. Required of students in mechanical engineering. Charge for materials, $5.00. * *Nine hours a week.* Spring semester.

5c. Machine Work.—A shorter course than 5a and 5b, required of students in electrical engineering. Charge for material $5.00. * *Four hours a week.* Fall semester.

5d. Machine Work.—A continuation of the machine tool work in the spring semester. Required of students in electrical engineering. Charge for material, $5.00. * *Four hours a week.* Spring semester.

6. Foundry Work.—Foundry instruction is given in molding, mixing of materials, operation of cupolas, etc. The work is assigned in connec-

tion with course 5, ten per cent. of the hours registered for under course 5 being applied to foundry work.

7. Valve Gears.—The principal steam engine valve motions are studied in order to enable the student to gain a knowledge of the method of designing valve mechanisms. The Zeuner, Bilgram, and other valve-diagrams are made use of in this connection. Practical problems are solved in the drawing-room. Required of students in mechanical engineering. *Two hours a week.* Spring semester.

8. Machine Design.—A study of the designing of machines, involving the selection of materials, proportioning of parts for strength and rigidity, etc. Required of students in mechanical and electrical engineering. *Three hours a week.* Spring semester.

9. Materials of Engineering.—Metallurgy of iron, steel, copper, and the principal alloys. Physical properties of the metals, timber, hemp rope, etc. Protective coatings and preservatives. Required of students in mechanical engineering. *Two hours a week.* Fall semester.

10. Elementary Steam Engineering.—Types and details of steam boilers and engines and auxiliary machinery. A consideration of fuels and the chemistry of combustion. Elementary study of the Bilgram and Zeuner valve diagrams. The use of the steam engine indicator. Required of students in mechanical and electrical engineering. *Two hours a week.* Spring semester.

11. Thermodynamics.—The fundamental theories relating to the steam engine and other heat engines. Steam calorimeters, injectors, compressors and refrigerating machinery included. Required of students in mechanical and electrical engineering. *Three hours a week.* Fall

12. Steam Boiler Design.—A study of the important points affecting the design of fire-tube and water-tube boilers, including the complete design of a boiler in the drawing-room. Required of students in mechanical engineering. * *Six hours a week.* Fall semester.

13. Hydraulic Machinery.—A study of the various forms of machinery used with hydraulic power, either in its development or its application. Required of students in mechanical engineering. Civil Engineering 23 is a prerequisite for this course. *Two hours a week.* Spring semester.

15a. Mechanical Laboratory.—The calibration of instruments used in engineering testing followed by the more elementary experimental work. Required of Juniors in mechanical engineering. The charge for the course is $2.00. † *Two hours a week.* Spring semester.

15b. Mechanical Laboratory.—Tests of materials, hydraulic testing, injectors, use of calorimeters, etc. Required of Seniors in mechanical engineering. The charge for the course is $2.00. † *Two hours a week.* Fall semester.

15c. Mechanical Laboratory.—Tests of steam engines and boilers, gasoline engines, etc. Required of Seniors in mechanical engineering. The charge for the course is $2.00. † *Four hours a week.* Spring semester.

16. Advanced Steam Engineering.—A continuation of course 11, indicating the connection between theory and practice in steam engines, steam turbines, air compressors, refrigerating machines, and gas engines. Considerations affecting the design and efficiency of operation of heat motors. Required of students in mechanical engineering. *Two hours a week.* Spring semester.

17. Steam Engine Design.—A study of problems affecting the design of the steam engine with regard to their bearing on general machine design. A steam engine is partially designed in the drawing room. Required of students in mechanical engineering. * *Six hours a week.* Spring semester.

18. Advanced Machine Design.—A continuation of course 8, including the execution of the design of some typical machines. Required of students in mechanical engineering. * *Six hours a week.* Fall semester.

19. Machine Drawing.—Instruction in modern drafting-room methods, shop terms, etc. The practical application of drawing to use in the construction of machines. Required of students in mechanical engineering. * *Four hours a week.* Spring semester.

20. Heating and Ventilation.—A lecture course. Required of students in mechanical engineering. *One hour a week.* Spring semester. ester.

21. Seminary.—General discussion of leading articles appearing in current engineering literature. Elective. *One hour a week.* Fall and spring semesters.

22. Thesis.—The results of some original investigation or design presented in proper form. The subject should be selected early in the fall semester of the senior year. See regulations regarding degrees.

24. Mechanism of Machines.—Lectures supplementing course 4. Required of students in mechanical engineering. *One hour a week.* Fall semester.

25. Strength of Materials by Test.—A course in the mechanical laborator for students in civil engineering. The charge for the course is $2.00. † *Two hours a week.* Spring semester.

26. Mechanical Laboratory.—A course of experiments in the laboratory especially arranged to meet the needs of the student in electrical engineering. Required. The charge for the course is $2.00. † *Three hours a week.* Fall semester.

MECHANICS AND DRAWING

Professor Weston; Mr. Grover; Mr. Farnsworth

1. Drawing.—Instruction and practise in technical free-hand drawing and lettering, in the care of drawing instruments and their use in elementary problems involving straight lines and circles. The text-book is Anthony's Mechanical Drawing. * *Six hours a week.* Fall semester.

2. Mechanical Drawing.—The study and construction of geometrical problems, conic sections, and problems in projection, followed by practise in the conventional methods of representing surfaces and materials by means of section lines. The text-book is Anthony's Mechanical Drawing. * *Six hours a week.* Spring semester.

3. Drawing.—The elementary principles and problems of descriptive geometry including intersections and developments. * *Six hours a week.* Fall semester.

4. Drawing.—A continued study of the methods of projections including isometric projection, cabinet projection, and linear perspective; followed by instruction and practise in mechanical lettering, the design of titles, of working drawings, and the making of tracings and blue-prints. * *Six hours a week.* Spring semester.

5. Mechanics.—The fundamental principles of statics, kinematics, and kinetics, with applications to practical problems; exercises in finding centre of gravity and moment of inertia; the study of stresses and strains in bodies subject to tension, compression, and shearing; the common theory of beams, including shearing force, bending moment, and elastic curve; torsional stresses and theories of stress in long columns. The text-book is Maurer's Technical Mechanics, supplemented by lectures. *Five hours a week.* Fall semester.

6. Mechanics.—A continuation of course 5. *Five hours a week.* Spring semester.

7. Advanced Mechanics.—General principles of kinematics, statics, and kinetics; the mathematical theory of elasticity; the theory of the potential function, with applications to problems in gravitation, hydromechanics, etc. *Two hours a week.* Fall semester.

8. Advanced Mechanics.—A continuation of course 7. *Three hours a week.* Spring semester.

10. Free-hand Drawing.—Free-hand pencil practise in the drawing of designs involving straight lines and curves, in lettering, in model drawing, and in pictorial perspective. A general course designed for non-engineering students. * *Six hours a week.* Fall semester.

MILITARY SCIENCE AND TACTICS

Professor Brown

1. Military, First Year's Course.

(a) Practical:

1—U. S. Infantry Drill Regulations to include the School of the Battalion, Advance and Rear Guards, Outposts, Marches, and Ceremonies.
2—Infantry Target Practice.
3—Field Service Regulations.
4—Guard Duty.

(b) Theoretical:

1—U. S. Infantry Drill Regulations to include the School of the Company.
2—Manual of Guard Duty.
3—Field Service Regulations.
4—Small Arms Firing Regulations.

Required of all students, except as provided on p. 37. *Five hours, or the equivalent, a week, counting one credit.*

2. Military, Second Year's Course.

(a) Practical:

The same as course 1 (a).

(b) Theoretical:

1—U. S. Infantry Drill Regulations, School of the Battalion, Advance and Rear Guards, Outposts, Marches, and Ceremonies.

2.—Records and Official Papers.

3—Small Arms Firing Regulations.

4—Field Service Regulations.

Open to all who have completed course 1. All will be non-commissioned officers. *Five hours, or the equivalent, a week, counting one credit.*

3. Military, Third Year's Course.

(a) Practical:

Duties consistent with rank in carrying out (a) in courses 1 and 2.

(b) Theoretical:

Assistant instructors over those taking course 1 (b).

Open to all who have completed course 2. All will be officers, or non-commissioned officers. *Five hours, or the equivalent, a week, counting one credit.*

4. Military, Fourth Year's Course.

(a) Practical:

The same as for course 3 (a).

(b) Theoretical:

Assistant instructors over those taking course 2 (b).

Open to all who have completed course 3. All will be officers. *Five hours, or the equivalent, a week, counting one credit.*

Organization of Battalion, October, 1908

Major, Commanding the Battalion, H. M. Bowman.
Captain and Adjutant, G. E. Springer.
First Lieutenant and Quartermaster, F. E. Wiley.
Sergeant Major, R. W. Buzzell.
Battalion Quartermaster Sergeant, W. F. Davis.
Company "A," Captain, G. A. Wakefield.
First Lieutenant, A. H. Blaisdell.
Second Lieutenant, H. P. Burden.
Sergeants, 1st, D. N. Peaslee; 2nd, F. L. Chenery; 3rd, W. R. Ballou; 4th, W. T. Faulkner; 5th, W. A. Wallace.

Quartermaster Sergeant, W. P. Cushman.
Corporals, B. C. Kent, T. L. Arbuckle, R. M. Small, P. C. Loring.
Musicians, D. D. Stark, K. D. Woodard.

Company "B," Captain, H. H. Rich.
First Lieutenant, H. M. Woods.
Second Lieutenants, A. H. Hart, F. H. Derby.
Sergeants, 1st, H. K. Fenn; 2nd, G. W. Gifford; 3rd, F. P. Kingsbury; 4th, A. H. Weeks; 5th, W. K. Hansen; Q. M. Sgt., C. D. Rea.
Corporals, W. E. Shrump, A. W. Jones, N. B. Whitcomb, H. L. Crosby.
Musician, G. A. Middlemess.

Company "C," Captain, E. S. Alton.
First Lieutenant, G. V. Nauman.
Second Lieutenants, R. R. Day, H. W. Vickery.
Sergeants, 1st, J. O. Carr; 2nd, H. C. Faulkner; 3rd, J. C. Cassey; 4th, W. S. Could; 5th, J. W. Dunn.
Corporals, F. W. Winchester, G. B. Spear, W. D. Murray, L. E. Drew.
Musician, D. C. Jewett.

Company "D," Captain W. O. Harvey.
First Lieutenant, C. L. Lycette.
Second Lieutenants, O. W. Holmes, J. J. Burke.
Sergeants, 1st, R. R. Henderson; 2nd, E. Ayer; 3rd, C. H. Reed; 4th, E. J. Webster; 5th, J. W. Underhill; Q. M. Sgt., R. J. Gordon.
Corporals, K. S. Mansfield, F. L. Darrell, W. R. Morse, R. L. Talbot.
Musician, A. A. McPhetres.

PHARMACY

PROFESSOR JACKMAN

1. PHARMACEUTICAL CHEMISTRY.—Chemical formulæ; principles, chemical reactions; chemical equations, with special reference to pharmaceutical processes. The text-books is Prescott and Johnson's Qualitative Chemical Analysis. *Five hours a week.* Fall semester.

2. PHARMACY.—Pharmacopœias, dispensatories, etc.; weights and measures; specific gravity; pharmaceutical uses of heat; pharmaceutical arithmetic and problems; the chemical elements, official salts, their preparations; organic compounds, their official preparations; official drugs, their preparations; animal preparations; extemporaneous pharmacy; the principles of dispensing, etc. The text-book is Caspari's Pharmacy. *Five hours a week.* Fall semester.

3. Laboratory Pharmacy.—Official and National Formulary preparations and tests. The operations of manufacturing pharmacy, including the preparation of granular and scale salts, infusions, syrups, tinctures, and other galenicals; official tests of chemicals, drugs, and preparations, for identity, strength and adulteration; drug assaying. The text-books are Caspari's Pharmacy and the U. S. Pharmacopœia. † *Twelve hours a week.* Fall semester.

4. Pharmacopœia.—A complete review of the pharmacopœia, with special reference to the chemical and pharmaceutical principles involved in tests and preparations. The text-books are Caspari's Pharmacy and the U. S. Pharmacopœia. *Five hours a week.* Spring semester.

5. Inorganic Pharmacognosy.—Nomenclature; practical exercises in the identification of specimens. The text-book is the U. S. Pharmacopœia. *Two hours a week.* Fall semester.

6. Organic Pharmacognosy.—Nomenclature; habitat, etc.; practical exercises. The text-books are the U. S. Pharmacopœia and Culbreth's Materia Medica. *Four hours a week.* Spring semester.

7. Materia Medica.—Chemicals and drugs; their nature, uses, classification, therapeutic action, and doses; poisons, and antidotes. The text-book is Potter's Materia Medica. *Three hours a week.* Fall semester.

9. Pharmacy Readings.—Current pharmacy literature; research and reference readings; abstracting; reports. † *Three or five hours a week.* Spring semester.

10. Laboratory Pharmacy.—A continuation of course 3. † *Ten hours a week.* Spring semester.

11. Prescriptions.—Critical examination of prescriptions from actual files, with reference to inelegance, and to physiological, pharmaceutical, and chemical incompatibility; doses; methods and order of compounding, etc. The text-book is Ruddiman's Incompatibilities in Prescriptions. *Three hours a week.* Spring semester.

PHILOSOPHY

PROFESSOR CRAIG

Students intending to major in this department should begin with the course in Elementary Psychology. Those wishing only a minor amount of work in philosophy may begin with Elementary Psychology, Ethics, Elementary Logic, or History of Philosophy.

1. ELEMENTARY PSYCHOLOGY.—An introduction to the study of the mind or of consciousness. The working of the sense-organs, the relations between consciousness and the brain, the formation of habits, the activities of attention, memory, reasoning, emotion, instinct, and will, are described and discussed. The student is trained in the cardinal methods of psychologic investigation, including self-observation, observation of others, and experimentation. The text-book this year is James's Psychology (Briefer Course). *Three hours a week.* Fall semester.

2. PSYCHOLOGY.—A continuation of the preceding course, using a more advanced text-book, such as James's Principles of Psychology, or Stout's Analytic Psychology. In special cases a student may be allowed to take this course without having had Elementary Psychology. *Three hours a week.* Spring semester.

3. ETHICS.—The object of this course is to bring the student to do serious thinking on the question as to what is right and what is wrong. Every college man ought to have an intelligent notion of the fundamental bases of morality. The course is to aid in the formation of intelligent opinions on this important subject. The text-book is Dewey and Tufts's Ethics. *Two hours a week.* Fall semester.

4. ELEMENTARY LOGIC.—An elementary practical course in reasoning both deductive and inductive. *Two hours a week.* Spring semester.

5. LOGIC.—A more advanced course, continued through a whole year. Primarily for those who have finished the course in Elementary Logic. *Two hours a week.* Fall and spring semesters.

6. HISTORY OF PHILOSOPHY.—Greek philosophy is treated at some length, especially in so far as it laid the foundation for all subsequent philosophic thought. Medieval philosophy is passed over rapidly, being treated chiefly as a connecting link between the Greek and the modern.

The beginnings of modern philosophy are then studied in detail, commencing with Descartes. The text-book is Rogers's A Student's History of Philosophy. *Three hours a week.* Fall semester.

7. History of Modern Philosophy.—A continuation of the preceding course, bringing the history, so far as practicable, down to the present time. *Three hours a week.* Spring semester.

8. Seminar.—Reviews of recent literature, both philosophical and psychological. The student may select literature on a topic in which he is especially interested. The work may be continued a number of semesters. *One hour a week.* Fall or spring semester.

9. Research.—Individual work, which may be entered upon by two classes of students: (a) graduate students who wish to write a thesis for publication; (b) undergraduate students who, though not sufficiently advanced to write a thesis for publication, have sufficient training and interest to pursue some special line of study. The work may be in any branch of philosophy or psychology, including experimentation. The work may be continued a number of semesters. *The number of hours a week is not fixed, but must be arranged at the time of registration.* Fall or spring semester.

PHYSICAL TRAINING

Mr. Mahan

1. Physical Training.—Class formation and figure marching; setting-up drills; free-arm and calisthenics movements; elementary dumbbell, wand, and apparatus exercises. * *Two hours a week.* Fall semester.

2. Physical Training.—Intermediate and advanced class exercises and combination apparatus work. * *Two hours a week.* Spring semester.

PHYSICS

Professor Stevens; Professor Woodman; Mr. Coon; Mr. Garlock

[Note.—For students who are specializing in this department the time indicated for the various laboratory courses may be extended. Two and one-half hours of laboratory work give a credit of one hour.]

1. General Physics.—Recitations and lectures on the dynamics of solids, liquids, and gases; sound and light; experiments before the class;

problems. Open to students who have taken Mathematics 4. *Five hours a week.* Fall semester.

2. General Physics.—A continuation of course 1; heat and electricity. *Three hours a week.* Spring semester.

3. Qualitative Laboratory Work.—A course in which students who are preparing to become teachers of physics are given the opportunity of performing the various class-room experiments which accompany the lectures in courses 1 and 2. **Five hours a week.* Fall semester.

5. Laboratory Physics.—The subjects usually included in an undergraduate course. Especial attention is given to the reduction of observations and the tabulation of results. Open to students who have taken either course 1 or course 12. **Five hours a week.* Spring semester.

7. Optics.—Lectures in continuation of course 1, based chiefly upon Preston's Light and Drude's Optics. Open to students who have taken Mathematics 8. *Three hours a week.* Spring semester.

8. Theory of Electricity and Magnetism.—Lectures and recitations on the mathematical theory of potential, capacity and inductance, following such books as Nipher's Electricity and Magnetism and J. J. Thomson's Elements of Electricity and Magnetism. *Two hours a week.* Spring semester of even years.

9. Mechanics and Heat.—Advanced laboratory work in continuation of course 5. **Seven and one-half hours a week, or five hours a week.* Fall semester.

10. Optics.—Advanced laboratory work in continuation of course 5. **Seven and one-half hours a week, or five hours a week.* Spring semester.

11. Electrical Measurements.—Advanced laboratory work in continuation of course 5. **Seven and one-half hours a week.* Fall semester.

12. General Physics.—A course covering the ground of course 1, with more attention to the experimental and historical aspects, and less to the mathematical. The text-book is Aldous's Physics. *Five hours a week.* Fall semester.

14. Theory of Electrical Measurements.—Lectures and recitations on the mathematical theory of electrical instruments and measurements. Especial attention is given to a discussion of the ordinary laboratory methods of measuring resistance, potential, current, capacity, and inductance. *Two hours a week.* Fall semester of even years.

15. Special Laboratory Course.—A course open to students who have completed courses 9, 10, and 11. A subject is assigned for original investigation, or the work of a published research is repeated. * *Five hours a week.* Fall semester.

16. Special Laboratory Course.—A continuation of couse 15. * *Seven and one-half hour a week.* Spring semester.

18. Electricity and Optics.—Advanced laboratory work in continuation of course 5. * *Five hours a week.* Fall semester.

19. Least Squares.—A course of lectures covering the more important topics treated in this subject. Required of juniors in civil engineering and elective for others who have taken Physics 1 and 2 and Mathematics 8. *One hour a week.* Fall semester.

SUMMER TERM

1. An elementary laboratory course. This includes the list of experiments adopted by the Maine colleges for admission in physics.

2. Advanced course. Work in any laboratory course offered in the University may be taken by students in the summer term who are properly qualified.

3. A series of experimental lectures on general physics. The grade of the work in this course will be determined by the preparation of the students electing it.

POULTRY HUSBANDRY

Professor Brown

[Courses 1 to 2a inclusive are required of all four year agricultural students. Courses 3 to 6 inclusive may be elected by regular students or special students who have completed 1 to 2a inclusive.]

1. Farm Poultry.—A study of poultry on the farm, houses, yards, breeds, feeds, eggs, and markets. *Two hours a week.* Fall semester

1a. Laboratory Practice.—The planning and building of poultry houses and poultry fixtures suitable for the farm; practice in the mixing of feeds and in the selection of breeding stock. To be taken with course 1. † *Two hours a week.* Fall semester.

2. Poultry Management.—A study of the feeding of fowls for egg production, of the care and preservation of eggs, of incubation, of brooding, and of housing, rearing, and feeding of young stock. *Two hours a week.* Spring semester.

2a. Laboratory Practice.—The setting up and operating of incubators and brooders, the feeding of young chicks, and the caponizing, growing, fattening, killing, dressing, and preparing of chickens for market. To be taken with course 2. † *Two hours a week.* Spring semester.

3. Poultry.—Considered as a business, as an investment, as an employment; its history, successes, failures, and possibilities. *One hour a week.* Fall semester.

3a. Laboratory Practice.—The planning and laying out of poultry plants, houses, and fixtures suitable for specialization on a large scale. † *Two hours a week.* Fall semester.

4. Breeds.—A study of the types and breeds of market and fancy poultry; their history, development, breed characteristics, economic and fancy values. *One hour a week.* Fall semester.

4a. Laboratory Practice.—The judging and scoring of the various breeds and varieties, and the handling, washing, and fitting of birds for exhibition. † *Two hours a week.* Fall semester.

5. Insects and Diseases.—An advanced course in the recognition of, treatment for, and remedies for the various insects and diseases affecting poultry. *One hour a week.* Spring semester.

6. Poultry Investigation.—A study of the Bulletins and Reports of the various Experiment Stations in this and other countries. An advanced course in lectures and laboratory practice in experimental work in breeding and in artificial incubation; the field of scientific research in poultry from the standpoint of biology, chemistry, and physics. † *Two hours a week.* Spring semester.

ROMANCE LANGUAGES

Professor Segall; Professor Raggio; Miss Fellows

French

1. Elementary French.—Fraser and Squair's Grammar. Syms' Reader. *Five hours a week.* Fall semester.

2. Elementary French.—A continuation of course 1. Fraser and Squair's Grammar; Verne, Une Ville Flottante; Muller, Les Grandes Découvertes. Collateral reading: Dumas, Les Trois Mousquetaires. *Five hours a week.* Spring semester.

3a. French Prose.—Bruce, Grammaire Française; Lamartine, Histoire des Girondins (selections); France, Livre de Mon Ami. Collateral reading: Bruno, Le Tour de la France; Lacombe, Petite Histoire du Peuple Français. Open to students who have taken courses 1 and 2 or an equivalent. *Three hours a week.* Fall semester.

3b. French Prose.—A continuation of course 3a. Bruce, Grammaire Française; Sand, La Mare au Diable; Hugo, Quatre-vingt-treize. Collateral reading: Michelet, France et Français; Laurie, Une Année de Collège à Paris. *Two hours a week.* Spring semester.

4a. Advanced French Prose.—Anatole France, Le Crime de Sylvestre Bonnard; composition. Collateral reading: Foncin, Le Pays de France. Open to students who have taken courses 3a and 3b, or an equivalent. *Three hours a week.* Fall semester.

4b. Advanced French Prose.—A continuation of course 4a. Contemporary story writers: D'Esparbès, Marin, Le Braz, Claretie, Coppée. Composition. Collateral reading: Rambaud, Petite Histoire de la Civilisation Française. *Three hours a week.* Spring semester.

5a. Elementary French Composition and Conversation.—Open to students who have taken courses 1 and 2, or an equivalent. *Two hours a week.* Fall semester.

5b. Elementary French Composition and Conversation.—A continuation of course 5a. *Two hours a week.* Spring semester.

6a. History of French Literature. From the beginning to 1715, with special reference to the seventeenth century. Doumic, Histoire de la Littérature Française. Lectures, recitations, reports. Open to students who have taken courses 4a and 4b. *Two hours a week.* Fall semester.

6b. History of French Literature.—A continuation of course 6a. From 1715 down to our own day, with special reference to the eighteenth century. Doumic, Histoire de la Littérature Française. Lectures, recitations, reports. *Two hours a week.* Spring semester.

7a. Advanced French Composition and Conversation.—Open to students who have taken courses 5a and 5b. *Two hours a week.* Fall semester.

7b. Advanced French Composition and Conversation.—A continuation of course 7a. *Two hours a week.* Spring semester.

8a. History of French Literature.—Nineteenth Century: First Half.—Doumic, Histoire de la Littérature Française. Lanson, Histoire de la Littérature Française. Lectures, recitations, reports. Open to students who have taken courses 4a and 4b. *Two hours a week.* Fall semester.

8b. History of French Literature.—A cintinuation of course 8a. Nineteenth Century: Second Half. Pellissier, Le Mouvement Littéraire au Dix-neuvièmesiècle. *Two hours a week.* Spring semester,

Spanish

9a. Elementary Spanish.—Hills and Ford, Grammar; Ramsey, Reader. *Three hours a week.* Fall semester.

9b. Elementary Spanish.—A continuation of course 9a. Hills and Ford Grammar; Alarcón, El Capitán Veneno. *Two hours a week.* Spring semester.

10a. Modern Spanish Prose.—Alarcón; Galdós; Valera. Composition. Open to students who have taken courses 9a and 9b. *Three hours a week.* Fall semester.

10b. Modern Spanish Prose.—A continuation of course 10a. *Two hours a week.* Spring semester.

12a. Spanish.—Cervantes, Don Quixote. Open to students who have taken courses 10a and 10b. *Two hours a week.* Fall semester.

12b. The Spanish Drama in the Seventeenth Century.—A continuation of course 12a. *Two hours a week.* Spring semester.

Italian

11a. Elementary Italian.—Grandgent's Grammar; Bowen, First Italian Readings. Open to students who have taken courses 1 and 2. *Three hours a week.* Given in the fall semester of odd years.

11b. Elementary Italian.—A continuation of course 11a. Composition; Goldoni, La Locandiera; Gherardi del Testa, L'oro e l'orpello. *Three hours a week.* Given in the spring semester of even years.

SUMMER TERM (Professor Raggio)

1. Elementary Course.—This course is intended for beginners and corresponds to the work done in one year in preparatory schools, and in one-half year in college. The book used will be Fraser and Squair's Abridged French Grammar (D. C. Heath & Co.).

2. Intermediate Course.—This course is intended for those who have already studied French for one year in preparatory schools. The books used will be Bruce's Grammaire Française (D. C. Heath & Co.); Bruno's Le Tour de la France (American Book Co.).

3. Advanced Course.—This course is intended for those who have already the required number of points for admission to the University, and who wish a course in French that may be counted towards a bachelor's degree. The books used will be Bruce's Grammaire Française (D. C. Heath & Co.); Lamartine's Histoire des Girondins (selections published by D. C. Heath & Co.); Hugo's Quatre-vingt-treize (Ginn & Co.).

4. Empirical French Phonetics.—This course is intended for teachers who wish to concentrate their efforts upon French pronunciation. Students will be made familiar with the alphabet of L'Association Phonétique Internationale. Lectures on phonetic subjects will be given, and each member of the class will be expected to read, memorize, and declaim passages written in phonetic script.

Note.—Courses 2 and 3 are mutually exclusive. That course will be given for which the greater number of students register.

ORGANIZATION OF THE UNIVERSITY

The University is divided into colleges, each offering several courses upon related subjects. The colleges are interdependent and together form a unit. The organization is as follows:

College of Arts and Sciences
- The Bachelor of Arts Courses
- The Bachelor of Science Courses
- The Summer Term

College of Agriculture
- The Agricultural Course
- The Forestry Course
- The Extension Courses
- The School Course in Agriculture

College of Technology
- The Chemical Course
- The Chemical Engineering Course
- The Civil Engineering Course
- The Mechanical Engineering Course
- The Electrical Engineering Course

College of Pharmacy
- The Pharmacy Course
- The Short Course in Pharmacy

College of Law

The Agricultural Experiment Station

GENERAL STATEMENT

The College of Arts and Sciences, the College of Agriculture, the College of Technology, and the College of Pharmacy offer four years' courses leading to the bachelor's degree. They have the following requirements in common for graduation:

1. English, one year, five hours a week, or the equivalent divided between two years.

2. Mathematics, one year, five hours a week.

3. Science (chemistry, physics, or biology), one year, five hours a week, of which time an important part must be occupied with laboratory work.

4. Language (Greek, Latin, German, French), the equivalent of one year, five hours a week. The requirement for Latin is fulfilled by completing Latin 1 and Latin 2; and for Greek by completing Greek 1 and Greek 2. A student beginning German or French must receive at least two credits in the subject to count it toward a degree.

5. Military Science and Tactics, one year, five hours a week.

6. Physical Training, one year, two hours a week.

The science requirement demands a year's work in some one science, and is not fulfilled by fractions of a year's work in two or more sciences. In making up the language requirement, work done in preparation for college may be counted, but two years' preparatory study will be reckoned as one year of college work.

Twenty-five credits (one credit is given for a recitation course that meets five hours a week, or for a laboratory course that meets at least ten hours a week, for one half year) are required for graduation in the College of Arts and Sciences; thirty credits are required for graduation in the College of Technology, the College of Agriculture, and the College of Pharmacy.

Requirements in detail are printed under each college.

COLLEGE OF ARTS AND SCIENCES

FACULTY OF INSTRUCTION

GEORGE EMORY FELLOWS, PH. D., L. H. D., LL. D.
President of the University
JAMES STACY STEVENS, M. S., LL. D.
Dean and Professor of Physics
MERRITT CALDWELL FERNALD, PH. D., LL. D.
Emeritus Professor of Philosophy
ALFRED BELLAMY AUBERT, M. S. *Professor of Chemistry*
LUCIUS HERBERT MERRILL, Sc. D.
Professor of Biological and Agricultural Chemistry
JAMES NORRIS HART, C. E., M. S., Sc. D.
Professor of Mathematics and Astronomy
FREMONT LINCOLN RUSSELL, B. S., V. S.
Professor of Bacteriology and Veterinary Science
HORACE MELVYN ESTABROOKE, M. A. *Professor of English*
JOHN HOMER HUDDILSTON, PH. D. *Professor of Greek*
GILMAN ARTHUR DREW, PH. D. *Professor of Biology*
RALPH KNEELAND JONES, B. S. *Librarian*
JACOB BERNARD SEGALL, PH. D.
Professor of Romance Languages
GEORGE DAVIS CHASE, PH. D. *Professor of Latin*
CAROLINE COLVIN, PH. D. *Professor of History*
CHARLES DAVIDSON, PH. D. *Professor of Education*
JOSEPH WILLIAM CARR, PH. D. *Professor of Germanic Languages*
ROBERT JAMES SPRAGUE, PH. D.
Professor of Economics and Sociology
WALTER STEVENS BROWN
Professor of Military Science and Tactics
WALLACE CRAIG, PH. D. *Professor of Philosophy*
MINTIN ASBURY CHRYSLER, PH. D.
Associate Professor of Botany
GUY ANDREW THOMPSON, M. A. *Assistant Professor of English*
ANDREW PAUL RAGGIO, PH. D.
Assistant Professor of Romance Languages
HARLEY RICHARD WILLARD, M. A.
Assistant Professor of Mathematics

LEON ELMER WOODMAN, M. A.
Assistant Professor of Physics
WINDSOR PRATT DAGGETT, PH. B.
Assistant Professor of Public Speaking
LAURIE LORENZO BURGESS, M. S.
Instructor in Chemistry (Summer Term)
ARTHUR JOHNSON EAMES, B. A.
Instructor in Botany (Summer Term)
WALTER EVERETT PRINCE, M. A. *Instructor in English*
ELMER EARL MOOTS, B. C. E., M. S. *Instructor in Mathematics*
ROBERT EDMUND CLAYTON, B. S. *Instructor in Chemistry*
GLADYS ETHEL FELLOWS, B. A.
Instructor in Romance Languages
JAMES SEYMOUR, PH. C., B. S. *Instructor in Chemistry*
HENRY LEWIS SWEET, B. A. *Instructor in Mathematics*
WILLIS FLYE WASHBURN, B. S. *Instructor in Chemistry*
LOWELL JACOB REED, B. S. *Instructor in Mathematics*
GEORGE EDWARD PEARSON, M. A. *Instructor in English*
HARRY NEWTON CONSER, M. S., M. A. *Instructor in Botany*
EDITH MAYNARD WALLACE, M. A. *Instructor in Biology*
JOHN FRANCIS MAHAN *Physical Director*
JAMES PITT FARNSWORTH, B. S. *Tutor in Drawing*
ROBERT KENT STEWARD, B. S. *Tutor in Civil Engineering*
JOSEPH LEWIS COON, PH. B. *Tutor in Physics*
EDWARD ALLEN CARLOCK, B. S. *Tutor in Physics*
ANNE MARGARET MERRILL, B. A. *Fellow in German*
PAYSON SMITH, LL. D. *Lecturer on Superintendence*
KENNETH CHARLES MORTON SILLS, A. M.
Lecturer on Roman Literature

GENERAL INFORMATION

THE COLLEGE OF ARTS AND SCIENCES comprises:
The Bachelor of Arts Courses
The Bachelor of Science Courses
The Summer Term

The College of Arts and Sciences offers a course of liberal training equivalent to that of the standard New England College. It designs particularly to meet the needs of three classes of students:

1. Men and women who desire to complete their studies with a course in general culture.

2. Men and women who desire to enter professional schools which require a collegiate degree. The B. A. degree of the University of Maine is accepted as of the first rank at the graduate departments of our best universities.

3. Men and women who wish to fit themselves for the profession of teachers in secondary schools, or for school superintendencies.

ADMISSION

The requirements for admission are given in full on pages 49-57; they are practically the same as for other New England Colleges and may be met by a four years' preparatory course in a good high school or academy.

FRESHMAN STUDIES

The work of the first year is conditioned somewhat on the subjects offered for admission. Mathematics, which is required of all students, may best be taken in the Freshman year. Other subjects recommended for the Freshman year are English, French or German, chemistry, and drawing.

MAJOR INSTRUCTORS

Each student must select, in some one department, work to be pursued three or four years, five recitations a week. Any one of the following departments may be chosen for major work: biology (including zoölogy, botany, physiology, and entomology), chemistry, economics, education, English, German, Greek, history, Latin, mathematics and astronomy, philosophy, physics, Romance languages (including French, Spanish, and Italian).

In many cases the selection of a major subject need not be made before the beginning of the sophomore year. A student may change his major subject with the consent of the professors in charge of the department which he leaves and the one which he wishes to enter; but no student will be graduated who has not finished all the work required for graduation in some one department, no matter how much work he may have done in other departments. The major subject must include work counting not less than six nor more than eight credits. In the case of departments in which less work is offered than amounts to six credits, this amount must be made up from such other related departments as the professor under whose direction the major is taken may prescribe. The remainder of the student's work may be selected from any department or departments of the University. This must be done with the advice of the head of the department in which the student has chosen

his major subject, that it may bear some useful relation to his other work.

The head of the department in which the student has chosen his major subject becomes his major instructor, and during the remainder of the course this instructor acts as chief adviser in all matters relating to the course, and is a representative of the student before the faculty.

THE BACHELOR OF ARTS COURSES

The work in the College of Arts and Sciences leads first to the degree of Bachelor of Arts (B. A.). The course is a 25 credit course and is regularly completed in four years; but a bright student of exceptional preparation and application may complete the requirements in three years. Students fitting themselves for professional or technical schools are often encouraged to do this, but prospective teachers are recommended to spend four years on their college course.

THE BACHELOR OF SCIENCE COURSES

These courses are arranged for those who seek a broad general training, based largely upon the study of some one subject as a major, with the remainder of the work selected from the wide range of subjects offered at the University.

At graduation the student receives the degree of Bachelor of Science. Upon the completion of one year's prescribed work in residence, including the presentation of a satisfactory thesis and examination at the University, he receives the degree of Master of Science.

No outline of the courses in the College of Arts and Sciences is given in the catalog, but students may have such an outline presented to them by applying to the professor in charge of the department in which they are interested. Groups of studies may be made up which would be desirable for students intending to prepare for teaching, or to enter upon the study of law, medicine, or theology.

GRADUATE COURSES

The candidate for the degree of Master of Arts or Master of Science must have received the corresponding bachelor's degree from this institution or one granting a fully equivalent degree.

At least one year must elapse between the conferring of the bachelor's and master's degree.

No work done before the conferring of the bachelor's degree can be counted towards the master's degree.

The candidate shall devote at least one year to graduate resident study and shall complete work of the equivalent of six credits or fifteen hours per week throughout a college year.

The course of study shall be submitted to and approved by the committee on graduate degrees.

The course of study shall consist of work in one major department or subject in which the candidate has already pursued undergraduate study for at least two years, and work in not more than two minor subjects which bears a distinct relation to the general plan or purpose of his major subject.

At least three-fifths of the work must be done in the major subject.

All of the work must be of advanced grade and must be tested by examinations which the candidate must pass with distinction.

The candidate shall prepare as a part of his course of study a satisfactory thesis on some topic connected with his major subject which may count for not more than three of the required fifteen hours.

THE SUMMER TERM

General Information

The summer term of the University of Maine is not a summer school, but so far as is practicable the work is coördinate with that of the remainder of the year. The majority of the courses offered are of college grade and, when completed, entitle the student to full credit on the university books. There are no examinations for admission, and students are permitted to enter any class in which they can satisfactorily carry on the work. Before counting this work toward a collegiate degree, the college entrance conditions must be met.

Three classes of students may be benefited by the work of this term:

1. Teachers in the high schools and grammar schools who wish to fit themselves for more advanced positions. A small expenditure of time and money in the summer vacation may be the means of securing a more desirable position. School superintendents are coming to discriminate in favor of those teachers who advance in their work.
2. College students who may wish to anticipate work in their course, or who may have back work in arrears. A student should be able to make one credit (the equivalent of a five hours' study for eighteen weeks) during the summer term.

3. Courses in physics, chemistry, mathematics, Latin, and other subjects are offered covering the work of the high school. In this way a student who is slightly deficient at the end of the school year may prepare himself for college. These courses give no credit on the University books.

Courses of Study

During the summer of 1908 courses were offered in the following subjects: Botany, Chemistry, Education, English, French, German, History, Latin, Mathematics, and Physics. These courses are described in connection with the courses offered at the University during the remainder of the year.

Lectures, 1908

President G. E. Fellows, Industrial Education
Hon. Payson Smith, State Superintendent of Public Schools, An Educational Problem
Professor G. D. Chase, Numismatics
Dean J. S. Stevens, Fads and Fancies in Science

Vesper Services

A brief religious service is conducted each Sunday afternoon at 4.00 P. M. in the Library. This consists of a song service and a brief address.

Library

Throughout the summer term the University library of 27,000 volumes and the reading room, containing about three hundred periodicals and the Maine daily papers, will be open from 9.00 A. M. to 12 M., and from 2.00 to 5.00 P. M. daily, except Saturday afternoon and Sunday.

The library privileges ordinarily accorded to University students, including the home use of books, will be extended to students in the summer courses.

Laboratories, Museums, and Observatory

The laboratories belonging to the departments of physics, chemistry, and botany will be available for use of the students. In the physical laboratory there is ample provision for carrying on the various courses from the preparatory work to that of the graduate student in the University.

In the chemical laboratory a small charge is made to cover the cost of the articles used. The department is well equipped with modern apparatus.

The botanical laboratory is in charge of the professor of biology. The student is furnished with microscope, specimens, and preparations for advanced work.

The museum is illustrative of the rocks and fauna of Maine, and will be open at stated periods for the use of the students.

The observatory contains an eight-inch telescope, vertical circle, and other instruments of precision. The work of the observatory will be explained by Professor Hart in evening lectures.

Expenses

Tuition for the term of five weeks, covering all charges for instruction in any number of courses that the student may elect, use of library and laboratories, except a small additional fee for those taking laboratory courses:

For residents of Maine, $12.00.

For residents of other states, $18.00.

Board and room in any of the University buildings, including light, and necessary furniture $24.00 for the term, payable in advance.

Recreation

Most of the class work is held during the forenoon, leaving the afternoon and evening free for study and recreation.

On the campus are several excellent tennis courts. The neighboring country affords many attractive excursions, on foot, by bicycle, carriage, or electric cars. Maine's famous seaside resort, Bar Harbor, is but one and one-half hours distant by rail, while Mount Kineo and Moosehead Lake are at only a slightly greater distance and easily accessible.

Within easy riding or wheeling distance are Lakes Pushaw and Chemo, as well as several attractive mountains.

In General

Prospective students are invited to consult Dean Stevens, who is in charge of the summer session, or any of the other instructors, for further details regarding any of the courses, or upon any subject relating to the work. It is the wish of the authorities to offer such courses as will best appeal to the teachers of Maine and others who desire to avail themselves of these privileges.

If there should be a considerable demand for other studies than those named, arrangements will be made to provide for them as far as practicable. In case the registration for any course offered falls below a certain minimum, it may be withdrawn. The list of instructors and the courses outlined in this catalog were for the summer of 1908. Unimportant changes are likely to be made for the coming term.

DEPARTMENT OF EDUCATION

Advisory Courses

For students who are preparing to teach in Secondary Schools the following courses have been arranged for (1) teachers of English, (2) teachers of Latin, (3) teachers of Modern Languages, (4) teachers of Mathematics, (5) teachers of Physical Sciences, (6) teachers of Natural Sciences, (7) teachers of Agriculture. These courses are advisory only, and election must be made subject to the requirements of the time schedule, but it is believed that they will be of assistance in determining the relative importance of subjects aside from the major subject chosen.

Freshmen are advised to take the required subjects with the following additions: for (1), any language, preferably Latin, and History 1 and 2; for (2), Latin 1 and 2 and one science; for (3), the modern language not taken in preparation and Latin 1 and 2; for (4), German 1 and 2 and Chemistry 1, 2, 3, and 4; for (5) and (7), a modern language and Chemistry 1, 2, 3, and 4; for (6), a modern language and Biology 1, 2, 21, 22.

For upper classmen, the following electives are advised:
For Teachers of English:

Sophomore Year

First semester: English 2a, 6. 8; German 3a or 1; French 3a or 1; Chemistry 1, 3; History 3; Education 1.

Second semester: English 2b, 7, 9; German 3b or 2; French 3b or 2; Chemistry 2, 4; History 4; Education 2.

Junior Year

First semester: English 10, 12, 15, 17; Education 3; Economics 1a; Philosophy 1.

Second semester: English 11, 13, 14; Education 4; Economics 2a; Biology 4.

Senior Year

First semester: English 19, 20, 22; Education 5; History 7; Philosophy 6.

Second semester: English 21, 23, English course on secondary requirements; Education 6, 8; History 8; Philosophy 7.

For Teachers of Latin:

Sophomore Year

First semester: Latin 3, 6; English 2a, 6; second year of modern language; History 1; Education 1; mathematics or science.

Second semester: Latin 4, 6; English 2b, 7; second year of modern language; History 2; Education 2; mathematics or science.

Junior Year

First semester: Latin 7, 9, 6, 11; third year of modern language; Economics 1a; Education 3.

Second semester; Latin 8, 10, 6, 12; third year of modern language; Economics 2a; Education 4.

Senior Year

First semester: Latin 15, 19a, 18, 13; English 8; third year of modern language; Philosophy 1; Education 5.

Second semester: Latin 16, 19b, 20, 21, 14, review of secondary texts; Philosophy 4; Education 6, 8.

For Teachers of Modern Languages:

Sophomore Year

First semester: German 3a; French 3a; Latin 3; English 2a, 6; History 1; mathematics or science.

Second semester: German 3b; French 3b; Latin 4; English 2b, 7; History 2; mathematics or science.

Junior Year

First semester: German 4a, 5a, 11; French 4a, 5a; Eduacation 1; Economics 3a.

Second semester; German 4b, 5b; French 4b, 5b; Education 2, Economics 8.

Senior Year

First semester: German 7a, 8a; French 6a, 7a, Spanish or Italian; Philosophy 1 or History 5; Education 5.

Second semester: German 7b, 8b; French 6b, 7b, Spanish or Italian; Philosophy 4 or History 6; Education 8.

For Teachers of Mathematics:

Sophomore Year

First semester: Mathematics 6b, 7; English 2a; German 3a; Physics 1; Drawing 1; Education 1.

Second semester: Mathematics 8; English 2b; German 3b; Physics 2, 5; Drawing 2; Education 2.

Junior Year

First semester: Mathematics 19, 20 or 12; French 1 or 3a; Physics 8, or Physics 19; Education 3; Philosophy 1.

Second semester: Mathematics 11, 9, 15 or 13; French 2 or 3b; Education 4; Philosophy 4.

Senior Year

First semester: Mathematics 10, 12 or 20; Economics 1a; History 7; Education 5.

Second semester: Mathematics 13 or 15, review of secondary mathematics with methods; Physics 9; History 8.

For Teachers of Physical Sciences:

Sophomore Year

First semester: Chemistry 5, 14; German 3a or French 3a; Mathematics 6b, 7; English 2a; Education 1.

Second semester: Chemistry 6, 15; Mathematics 8; German 3b or French 3b; English 2b; Education 2.

Junior Year

First semester: Chemistry 7; Physics 1; Biology 1; English 8; Education 3.

Second semester: Chemistry 8; Physics 2, 5; Botany 1; English 9; Education 3.

Senior Year

First semester: Chemistry 16; Physics 8, 9, 14; Economics 7a; History 7; Education 5.

Second semester: Chemistry 18; Physics 10 or 7; Physics 3, method for secondary schools; Economics 8; History 8; Education 8.

For Teachers of Natural Sciences:

Sophomore Year

First semester: Zoölogy 4, 7; Botany 1; Chemistry 1, 3; English 2a; German 4a, or French 4a; Education 1; Drawing 1.

Second semester: Zoölogy 1, 8; Chemistry 2, 4; English 2b; German 4b or French 4b; Education 2; Drawing 2.

Junior Year

First semester: Botany 3; Zoölogy 2; English 6; Physics 12; Education 3.

Second semester: Zoölogy 3, 10; Botany 4, 5; English 7; Physics 5; Education 4. Zoölogy 10 or Botany 4.

Senior Year

First semester: Elective biology; Economics 3; Education 5; English 8; History 7.

Second semester: Zoölogy 5, elective biology; Economics 6; English 9; Education 8; History 8.

Note.—As a preparation for the course in Latin, students should have taken four years of Latin and either three years of Greek or two of one modern language and one of another in the secondary school. If the student desires to prepare to teach both Greek and Latin, he should take three years of Greek and four of Latin in college. If he would omit Greek, he should take one year of the modern language in which he had most credits when he entered and two of another.

THE COLLEGE OF AGRICULTURE

FACULTY OF INSTRUCTION

GEORGE EMORY FELLOWS, PH. D., L. H. D., LL. D.
President of the University

WILLIAM DANIEL HURD, M. AGR. *Dean and Professor of Agronomy*

ALFRED BELLAMY AUBERT, M. S. *Professor of Chemistry*

LUCIUS HERBERT MERRILL, SC. D.
Professor of Biological and Agricultural Chemistry

JAMES NORRIS HART, C. E., M. S., SC. D.
Professor of Mathematics and Astronomy

FREMONT LINCOLN RUSSELL, B. S., V. S.
Professor of Bacteriology and Veterinary Science

HORACE MELVYN ESTABROOKE, M. A. *Professor of English*

GILMAN ARTHUR DREW, PH. D. *Professor of Biology*

RALPH KNEELAND JONES, B. S. *Librarian*

WALTER STEVENS BROWN
Professor of Military Science and Tactics

JACOB BERNARD SEGALL, PH. D.
Professor of Romance Languages

GORDON EDWIN TOWER, B. S., M. F. *Professor of Forestry*

JOSEPH WILLIAM CARR, PH. D.
Professor of Germanic Languages

CHARLES PARTRIDGE WESTON, C. E., M. A.
Professor of Mechanics and Drawing

PERCY ANDERSON CAMPBELL, M. S. A.
Professor of Animal Industry

MINTIN ASBURY CHRYSLER, PH. D.
Associate Professor of Botany

GUY ANDREW THOMPSON, M. A. *Assistant Professor of English*

ANDREW PAUL RAGGIO, PH. D.
Assistant Professor of Romance Languages

JAMES EARL McCLINTOCK, B. S.
Assistant Professor of Agronomy

IN CHARGE OF AGRICULTURAL EXTENSION WORK.

HARLEY RICHARD WILLARD, M. A.
Assistant Professor of Mathematics

EARNEST DAVID WAID, B. Sc. *Assistant Professor of Agronomy*
WINDSOR PRATT DAGGETT, Ph. B.
Assistant Professor of Public Speaking
VICTOR RAY GARDNER, M. S. A.
Assistant Professor of Horticulture
WILLIAM ARCHIBALD BROWN, B. S. A.
Assistant Professor of Animal Industry
ARCHER LEWIS GROVER, B. S. *Instructor in Drawing*
WALTER EVERETT PRINCE, M. A. *Instructor in English*
ELMER EARL MOOTS, B. C. E., M. S. *Instructor in Mathematics*
GLADYS ETHEL FELLOWS, B. A. *Instructor in Romance Languages*
JAMES SEYMOUR, Ph. C., B. S. *Instructor in Chemistry*
HENRY LEWIS SWEET, B. A. *Instructor in Mathematics*
WILLIS FLYE WASHBURN, B. S. *Instructor in Chemistry*
LOWELL JACOB REED, B. S. *Instructor in Mathematics*
GEORGE EDWARD PEARSON, M. A. *Instructor in English*
HARRY NEWTON CONSER, M. S., M. A. *Instructor in Botany*
EDITH MAYNARD WALLACE, M. A. *Instructor in Biology*
JOHN FRANCIS MAHAN *Physical Director*
JAMES PITT FARNSWORTH, B. S. *Tutor in Drawing*
ANNE MARGARET MERRILL, B. A. *Fellow in German*

GENERAL INFORMATION

The College of Agriculture comprises the departments of Agronomy, Animal Industry, Horticulture, Agricultural and Biological Chemistry, Veterinary Science and Bacteriology, Poultry Husbandry, Extension Work, and Forestry. The aim of the College is to prepare young men to become farmers, teachers of agriculture and allied sciences in schools and colleges, investigators of agricultural subjects in the United States Department of Agriculture, experiment station workers, foresters, and practical men. Tuition is free except in the course in forestry. On entering either the four year or two year school course in Agriculture a student is required to fill out a practical experience blank. Those who have not had experience in the operations common to ordinary farms are required to make themselves proficient in such lines before graduation.

The courses of instruction are organized as follows:

1. The Regular Courses:
   The four years general course in Agronomy, Animal Industry, and Horticulture
   The four years course for teachers in Elementary Agriculture
   The special courses in Agronomy, Animal Industry and Horticulture, and Poultry Management.

The course in Forestry
The course in Poultry Husbandry
The two years School Course in Agriculture
The short winter courses in Agronomy, Animal Industry, and Horticulture
The short course in Poultry Management
Farmers' week

2. The Extension Courses:
The correspondence courses
The lecture courses
The demonstration work
The co-operative experiments

The College Courses

The college courses are designed for those who wish to follow agriculture, animal and dairy husbandry, horticulture, poultry husbandry, chemistry relating to experiment station work, veterinary science and bacteriology, or forestry as a business, or who propose to become teachers or investigators in related sciences. The instruction is arranged with a view to emphasize fundamental principles and to give the student the largest amount of technical knowledge consistent therewith. To this end the theoretical instruction is associated with practical work and observation on the farm, the dairy, in the orchard and garden, poultry plant, the University woodlot, and in the various laboratories of the University; but time is not consumed in purely manual operations.

Certain studies are fundamental to all work in agricultural lines and these are included among the subjects required in the four year courses. After these fundamental subjects are completed, opportunity for election is given.

Students in agriculture who contemplate entering experiment station work should elect the course offered by the department of agricultural chemistry covering the qualitative and quantitative chemical analysis of fodders, fertilizers, and dairy products. Those intending to take this course should elect a preparatory course in quantitative chemical analysis.

The following course, embracing 30 credits, is the required course for four year agricultural students. It is recommended that the subjects be taken in the order stated in the course. The elective subjects are selected with the advice of the major instructor.

A course for those who intend to become teachers of elementary agriculture in the public schools is to be found following the regular course.

The Four Years Course in Agronomy, Animal Industry, and Horticulture

FRESHMAN YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Agronomy 1	2	Animal Industry 1	2
Agronomy 2, † 2	1	Animal Industry 2, † 2	1
Biology 1	3	Botany 1	4
Chemistry 1	2	Chemistry 2 and 4	4
Chemistry 3, † 2	1	English 1b	1
English 1a	1	English 3	3
English 3	3	Military 1, † 5	21-2
Drawing 1, † 4	2		
Military 1, † 5	21-2		
	171-2		171-2

SOPHOMORE YEAR

Agronomy 3, † 4	2	Agronomy 4	2
Animal Industry 3	2	Poultry Husbandry 1	2
Animal Industry 4, † 2	1	Poultry Husbandry 1a, † 2	1
Chemistry 14, † 8	4	English 2b	2
English 2a	1	Horticulture 1	2
Modern Language	3	Horticulture 4	2
Mathematics 4, 2	5	Modern Language	2
Zoölogy 4	2	Mathematics 1, 2	5
Physical Training 1	2-3	Forestry 1	2
		Physical Training 2	2-3
	202-3		202-3

JUNIOR YEAR

Agronomy 5	2	Animal Industry 7	2
Agronomy 5a, † 2	1	Animal Industry 8, * 3	1
Animal Industry 5	2	Bacteriology 1, † 6	3
Animal Industry 6, † 2	1	Biological Chemistry 2, † 6	3
Horticulture 2	3	Agricultural Chemistry 1	5
Biological Chemistry 1	5	Horticulture 3	3
Modern Language	3	Modern Language	3
Botany 8	3	Poultry Husbandry 2a, † 2	1
	20		21

SENIOR YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Agronomy, Animal Industry Horticulture, or Poultry Husbandry	3	Agronomy, Animal Industry, Horticulture, or Poultry Husbandry	2
Veterinary Science 3	2	Veterinary Science 2	3
Veterinary Science 4	1	Veterinary Science 4	1
Forestry 3, †3	11-2	Thesis (minimum)	3
Thesis (minimum)	3	Elective	8
Elective	6		17
	161-2		

The following subjects are included in a major in Agriculture:

Agronomy 1 to 6	2		credits
Animal Industry 1 to 8 Inclusive	2	5-10	credits
Horticulture 1 to 4 Inclusive	2		credits
Veterinary Science 1 to 2a inclusive	1	3-5	credits
Biological Chemistry 1 and 2	1	3-5	credits
Forestry 1, 2, and 3		3-5	credit
Agricultural Chemistry 3	1		credit
Bacteriology		3-5	credit
Poultry 1 to 2a inclusive	1		credit
Total	12	9-10	credits

At graduation the student receives the degree of Bachelor of Science. Upon completion of graduate work as prescribed by the University, and the presentation of a satisfactory thesis, he receives the degree of Master of Science.

Course in Agriculture for Those Who Intend to Become Teachers of This Subject in the Public Schools

This course is offered in response to a call for teachers capable of teaching elementary agriculture in schools and academies. In order to receive a degree 150 hours, or 30 credits, must be received. The following course as laid down covers 146 hours. The remaining 4 hours have been purposely left open for elective work in order that the student may receive as liberal a training in cultural studies, as is consistent with the amount of technical work necessary. It is recommended that the electives be taken from the departments of biology, history, economics, chemistry, physics, or English.

FRESHMAN YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Chemistry 1	2	Chemistry 2	3
Chemistry 2, † 2	1	Chemistry 4, † 2	1
English 1a	1	English 1b	1
English 3	3	English 4	3
Drawing 1, * 6	2	Drawing 2, * 6	2
Modern Language	3	Modern Language	2
Mathematics 4, 2	5	Mathematics 1, 2	5
Military 1, † 5	21-2	Military 1, † 5	21-2
	191-2		191-2

SOPHOMORE YEAR

Agronomy 1	2	Agronomy 4	2
Agronomy 2, † 2	1	Animal Industry 1	2
Biology 1	3	Animal Industry 2, † 2	1
Chemistry 14, † 8	4	Botany 1	4
Education 1	3	Education 2	2
English 2a	1	Chemistry 15, † 8	4
Mechanical Engineering 1b, * 4	1 1-3	Horticulture 1	2
Physical Training 1, * 2	2-3	Mechanical Engineering 2, * 4	1 1-3
Elective	3	Physical Training 2, * 2	2-3
	19		19

JUNIOR YEAR

Agronomy 3, † 4	2	Agronomy 5	2
Animal Industry 3	2	Agronomy 5a, † 2	1
Animal Industry 4, † 2	1	Horticulture 4	2
Zoölogy 4	2	Horticulture 3	3
Education 5	3	Education 8	3
Horticulture 2a † 2	1	Agronomy 11, * 3	1
Modern Language	3	Modern Language	2
Horticulture 2	3	Zoölogy 10	4
Elective	3	Veterinary Science 2	3
	20		21

SENIOR YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Animal Industry 5	2	Animal Industry 7	2
Biological Chemistry 1	5	Animal Industry 8, †2	1
Botany 8	3	Agricultural Chemistry 1	5
Horticulture 8	2	Veterinary Science 2	4
Physics 12	5	Bacteriology 1, †6	3
Elective	2	Physics 5, *5	2
		Forestry 1	2
	19		19

The Special Courses in Agronomy, Animal Industry, and Horticulture

The Special Courses are designed for young men and women who cannot well spend four years in preparing themselves to become farmers but who wish to secure special training in certain agricultural subjects. No fixed schedule of studies is prescribed, but students may elect along the line of horticulture, dairying, poultry management, veterinary science, agricultural chemistry, bacteriology or general farm crops and farm management.

Persons not candidates for a degree, who wish to take special studies, may be permitted to do so, if, upon examination, they give satisfactory evidence that they are prepared to take the desired studies. If they subsequently desire to become candidates for a degree, or to take a regular course, they will be required to pass all the entrance examinations. This privilege is intended for students of unusual maturity or previous advancement in particular subjects, not for those who are incompetent to pursue a regular course.

The annual expenses for courses of one year or more are the same as those for students in the four year courses. Tuition is free except in forestry.

The Two Years School Course in Agriculture

This is a course designed to train young men and women who wish to become practical farmers, farm superintendents, dairymen, poultrymen or gardeners, but who cannot devote time to high school or college training.

The same equipment is used and the same instructors give the work as in the four years University course, but the work is of a more elementary nature. All the classes are separate and distinct from the four year classes, and in no case will college credit be allowed for work done in the school course.

There are no entrance examinations required of those who desire to enter the school course. Students over fifteen years of age who are prepared for advanced grammar or high school work are eligible for registration. No tuition is charged in this course but the same registration and incidental fees of fifteen dollars a semester, or thirty dollars a year, are charged school course students in agriculture as are charged all others attending the University. Fees amounting to two dollars and fifty cents are charged in each of the carpentry and blacksmithing courses to cover cost of material used.

The practical side of the work in this course is strongly emphasized, and since students are expected to be able to do work and handle men when they have finished, those taking this course are required to spend the summer vacation between the first and second years in work at the college, for which reasonable wages will be paid, or on some farm approved by the faculty.

On completion of the course a certificate is awarded those who have satisfactorily done the work.

The following is a schedule of the work given:

FIRST YEAR

Fall Semester	*Spring Semester*
Soils and Soil Management	Fertilizers and Farm Mechanics
Animal Industry	Animal Industry and Dairy Work
Plant Propagation	Vegetable Gardening
English	Poultry
Business Arithmetic and Farm Accounts	English
Carpentry	Veterinary Science
Practical Dairying and Stock Management	Forge Work
Farm Practice and Laboratory Work	Practical Dairying and Stock Management
Seed Testing and Nursery Practice	Farm Practice and Laboratory Work
	Garden Practice and Laboratory Work

SECOND YEAR

Farm Crops and Farm Mechanics	Farm Crops and Farm Mechanics
Animal Industry	Animal Industry
Fruits	Fruit Growing
Poultry	Insects
Farm Chemistry	Poultry Management

Fall Semester	*Spring Semester*
Farm Botany	Forestry
English	Veterinary Science
Farm Practice and Laboratory Work	English
Practical Dairying and Stock Management	Practical Dairying and Stock Management
Fruit Picking, Packing, and Laboratory Work.	Farm Practice and Laboratory Work
	Orchard Practice and Laboratory Work

The Short Winter Course in General Agriculture and Dairying

This course begins on the Tuesday following the Christmas recess and continues for four weeks. It is designed to meet the requirements of creamery assistants, practical farmers, herdsmen, and others who desire to learn milk testing, butter making, the principles of animal nutrition and practices of feeding, breeding, judging stock, economical use of fertilizers, principles of crop production, and the diseases of farm animals.

Very few text-books are used, and the expenses for board and room, which are the only other expenses, are moderate. A circular describing this course is published each year and will be sent on request by applying to the Dean of the College of Agriculture.

The Short Course in Poultry Management

This course is given each spring to aid persons who wish a practical knowledge in order to carry on poultry breeding and management. The time in the course is about equally divided between the handling of incubators and brooders, the feeding and rearing of young chicks, the general management of mature fowls, scoring and judging, and killing and marketing poultry. The work is given by means of lectures and practical demonstrations.

Supplementing the work of the regular instructors in the University some of the best known poultrymen in this country are engaged to give lectures and demonstrations along special lines during this course. For purposes of instruction the college of agriculture keeps representatives of the leading breeds of fowls. During the year 1908, an incubator house, a brooder house for winter work, a fattening and killing house, and several colony houses have been built. A circular giving the dates and program of the course will be issued each year. This and other

information may be had by addressing the Dean of the College of Agriculture.

Farmers' Week

There are a large number of people who cannot come to the College for a great length of time, but who desire a few days of practical instruction. To reach and accommodate these, "Farmers' Week" is held. Lectures on practical agricultural subjects are given morning, afternoon, and evening. Practical demonstrations occupy a part of each afternoon. Besides the practical subjects discussed, one session is given up to problems of rural betterment, a section is arranged where Domestic Science for farmers' wives is taught. Dates and programs may be secured each year by addressing the Dean of the College of Agriculture.

The Department of Extension Work

Extension work in Agriculture embraces those forms of instruction, in subjects having to do with improved methods of agricultural production and with the general welfare of the rural population, that are offered to people not enrolled as resident students in educational institutions.

This work is intended to help persons directly on the farm and in the home; to aid those who desire definite instruction in practical agriculture, horticulture, and animal industry, but who cannot take a long or regular course at the University. It supplements the teaching and experimenting of the College of Agriculture and the Experiment Station. It is professedly a popular work, because it endeavors to aid the farmer to solve the practical problems of the farm, to quicken agricultural work, and to inspire greater interest in country life.

This department of the College of Agriculture offers correspondence courses, lecture courses, and demonstration work including coöperative experiments.

Correspondence Courses

These courses are given by means of text-books and free publications, either furnished by the College or procured from the U. S. Department of Agriculture, or from the various Experiment Stations. The text-books are furnished at publishers' prices. The courses are free and may be taken by individuals, granges, reading circles, or other organizations.

The following courses are offered:

Course 1.—Farm Crops and Crop Production.

Course 2.—Farm Management.

Course 3.—Feeding and Breeding of Farm Animals and Dairying.

Course 4.—Lessons in Poultry Keeping.

Course 5.—Fruit Growing and Vegetable Gardening.
Course 6.—Forestry.
Course 7.—Home Economics.
Course 8.—Elementary Agriculture.
More definite information will be sent upon request.

Lecture Courses

The College of Agriculture will send members of the faculty to speak at grange meetings, farmers' institutes, and other gatherings, if the traveling expenses of the lecturer ar paid by those holding the meeting.

Demonstration Work

The College of Agriculture will send members of the Faculty who will make demonstrations, showing as well as telling, how to solve many practical farm problems. These demonstrations are made on the farms and in the barns of the farmer, and are offered under the same conditions as the lectures.

The following is a partial list of the demonstrations that may be secured: home mixing of fertilizers; milk testing (use of Babcock tester); stock judging; potato spraying; fruit spraying; pruning and grafting; method of killing and dressing poultry; method of determining the age of horses; methods of giving medicine to domestic animals. All demonstrations are accompanied by lectures.

Experiments will be undertaken in coöperation with farmers along such lines as the following: the determination of the formula best suited for certain fields; the eradication of noxious weeds; the determination of the best means for increasing the hay crop.

Circulars giving full information upon these subjects will be sent upon request.

Besides the Demonstration work, Correspondence, and Lecture Courses, the College of Agriculture welcomes all kinds of correspondence on practical farm topics. If information is desired along lines relating to crops, fertilizers, dairy work, feeding, or orcharding and gardening, the various instructors are ready to give such assistance as they are able.

The Forestry Course

A complete undergraduate course in forestry is arranged, which may serve as the basis not only of practical work in forestry, but also of a liberal education. A knowledge of the principles of forestry in its different branches is given to the student, and some practice work is done in the forest. For students of agriculture this course offers work which will give a training in the management of the farmer's woodlot.

The instruction in this department consists of lectures, recitations, laboratory, and field work. The woodland belonging to the University, together with adjacent land covered by a young forest, furnishes a field for the study of many forest problems.

Students who complete the course are admitted to advanced standing in the graduate schools of forestry and are thus able to shorten the time required to obtain a master's degree. Students completing the course have also gone directly into practical work.

There are good openings for the student to obtain work in the Maine woods during the summer vacations, and many take advantage of the opportunity to get practical experience, and at the same time aid in defraying the expense of their University course.

Requirements for Graduation

FRESHMAN YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Biology 1	3	Botany 1	4
English 1a	1	English 1b	1
English 3	3	English 4	3
Drawing 1, † 4	2	Forestry 1	2
Mathematics 2, 4	5	Drawing 2, † 4	2
Modern Language	3	Mathematics 2, 6a	5
Military 1, † 5	2 1-2	Modern Language	2
		Military 1, † 5	2 1-2
	19 1-2		21 1-2

SOPHOMORE YEAR

Agronomy 1	2	Botany 3	4
Agronomy 2, † 2	1	Botany 11	4
Botany 2	4	Civil Engineering 2b, 2c	1 2-3
Botany 10	4	Chemistry 2	3
Civil Engineering 1a, 2a	3	Chemistry 4, † 2	1
Chemistry 1	2	English 2b	1
Chemistry 3, † 2	1	Modern Language	3
English 2a	1	Physical Training 2, * 2	2-3
Modern Language 3	3		
Physical Training 1, * 2	2-3		18 1-3
	21 2-3		

JUNIOR YEAR

Fall Semester Subject	Hours	*Spring Semester* Subject	Hours
Geology 1	3	Zoölogy 10	4
Zoölogy 4	2	Botany 9	2
Botany 3	4	Civil Engineering 9a	1
Forestry 6	2	Civil Engineering 9b	2
Forestry 8, †4	2	Forestry 7	2
Electives	5	Forestry 9, †4	2
		Electives	5
	18		18

SENIOR YEAR

Zoölogy 11	2	Forestry 11, *3	1
Forestry 10, *6	2	Forestry 13	1
Forestry 12	3 1-2	Forestry 14, †10	5
Forestry 4	1	Electives	10
Electives	9		
	17 1-2		17

Electives

Animal Industry 3	2	Zoölogy 8	2
Animal Industry 4, †2	1	Zoölogy 5	5
Animal Industry 5	2	Veterinary Science 2	3
Zoölogy 7	2	Bacteriology 2	1
Bacteriology 3, †6	2	Bacteriology 4	
Zoölogy 2	4	Botany 5	
Botany 5		Chemistry 8	2
Chemistry 7	3	Chemistry 13	3
Chemistry 14, †8	4	Chemistry 15, †8	4
Civil Engineering 3b	1	Civil Engineering 3a	2
Civil Engineering 4b	1	Civil Engineering 4a	1
Civil Engineering 4c	1	Civil Engineering 8	2
English 17	2	English 18	2
English 22	3	English 23	3
German		German	
French		French	
Spanish		Spanish	
History		History	
Mathematics	5	Mathematics	7
Mechanical Engineering 1b, *4	1 1-3	Mechanical Engineering 2, *4	1 1-3
Drawing 10, *6	2	Philosophy 4	2
Physics 12	5	Physics 5, *5	2

At graduation the student receives the degree of Bachelor of Science. Upon the completion of one year's prescribed graduate work in residence, including the presentation of a satisfactory thesis, he receives the degree of Master of Science.

THE COLLEGE OF TECHNOLOGY

FACULTY OF INSTRUCTION

GEORGE EMORY FELLOWS, PH. D., L. H. D., LL. D.
President of the University
JAMES NORRIS HART, C. E., M. S., Sc. D.
Professor of Mathematics and Astronomy. Acting Dean
ALFRED BELLAMY AUBERT, M. S. *Professor of Chemistry*
LUCIUS HERBERT MERRILL, Sc. D.
Professor of Biological and Agricultural Chemistry
FREMONT LINCOLN RUSSELL, B. S., V. S.
Professor of Bacteriology and Veterinary Science
HORACE MELVYN ESTABROOKE, M. A. *Professor of English*
JAMES STACY STEVENS, M. S., LL. D. *Professor of Physics*
GILMAN ARTHUR DREW, PH. D. *Professor of Biology*
RALPH KNEELAND JONES, B. S. *Librarian*
JACOB BERNARD SEGALL, PH. D.
Professor of Romance Languages
HAROLD SHERBURNE BOARDMAN, C. E.
Professor of Civil Engineering
ARTHUR CRAWFORD JEWETT, B. S.
Professor of Mechanical Engineering
WALTER KIERSTED GANONG, B. Sc.
Professor of Electrical Engineering
JOSEPH WILLIAM CARR, PH. D.
Professor of Germanic Languages
ROBERT JAMES SPRAGUE, PH. D.
Professor of Economics and Sociology
WALTER STEVENS BROWN
Professor of Military Science and Tactics
CHARLES PARTRIDGE WESTON, C. E., M. A.
Professor of Mechanics and Drawing
CHARLES BARTO BROWN, C. E.
Professor of Railroad Engineering
GUY ANDREW THOMPSON, M. A. *Assistant Professor of English*
ANDREW PAUL RAGGIO, PH. D.
Assistant Professor of Romance Languages

HARLEY RICHARD WILLARD, M. A.
Assistant Professor of Mathematics
LEON ELMER WOODMAN, M. A. *Assisant Professor of Physics*
GUSTAV FREDERICK WITTIG, B. S., E. E.
Assistant Professor of Electrical Engineering
WINDSOR PRATT DAGGETT, PH. B.
Assistant Professor of Public Speaking
ARCHER LEWIS GROVER, B. S. *Instructor in Drawing*
EVERETT WILLARD DAVEE *Instructor in Wood and Iron Work*
WALTER EVERETT PRINCE, M. A. *Instructor in English*
ELMER EARL MOOTS, B. C. E., M. S. *Instructor in Mathematics*
CHARLES JENKIN CARTER *Instructor in the Machine Shop*
PAUL LEONARD BEAN, B. S. *Instructor in Civil Engineering*
ROBERT EDMUND CLAYTON, B. S. *Instructor in Chemistry*
GLADY ETHEL FELLOWS, B. A. *Instructor in Romance Languages*
LESLIE INGALLS JOHNSTONE, B. S.
Instructor in Civil Engineering
JAMES SEYMOUR, PH. C., B. S. *Instructor in Chemistry*
HENRY LEWIS SWEET, B. A. *Instructor in Mathematics*
WILLIS FLYE WASHBURN, B. S. *Instructor in Chemistry*
LOWELL JACOB REED, B. S. *Instructor in Mahematics*
GEORGE EDWARD PEARSON, M. A. *Instructor in English*
HARRY NEWTON CONSER, M. S., M. A. *Instructor in Botany*
EDITH MAYNARD WALLACE, M. A. *Instructor in Biology*
JOHN FRANCIS MAHAN *Physical Director*
JAMES PITT FARNSWORTH, B. S. *Tutor in Drawing*
ROBERT KENT STEWARD, B. S. *Tutor in Civil Engineering*
JOSEPH LEWIS COON, PH. B. *Tutor in Physics*
EDWARD ALLEN GARLOCK, B. S. *Tutor in Physics*
ANNE MARGARET MERRILL, B. A. *Fellow in German*
ALBERT GUY DURGIN, B. S. *Assistant in Chemistry*

The following executive committee of the Faculty of Instruction of the College of Technology is given power to arrange courses, act upon petitions, and transact general business relating to the technical time of the departments of engineering. The regular meetings of the body occur on the Tuesday proceding the general faculty meeting at 4.30 P. M.

PROFESSOR BOARDMAN, *Chairman;* PROFESSOR GANONG, *Secretary;* DEAN HART, *Ex-Officio;* PROFESSOR AUBERT, PROFESSOR JEWETT, PROFESSOR WESTON, PROFESSOR BROWN, ASSISTANT PROFESSOR CURTIS, ASSISTANT PROFESSOR WITTIG, MR. GROVER, MR. BEAN, MR. JOHNSTONE, MR. STEWARD.

GENERAL INFORMATION

The College of Technology provides technical instruction in chemistry, and in various branches of engineering, including forestry. The number of credits required for graduation in this college is thirty. In such technical courses it is necessary to prescribe a large proportion of the work; but some elective studies may be chosen in the junior and senior years. Under each of the courses described below is given a tabulated statement of the subjects pursued and the amount of work required. The college comprises:

The Chemical Course
The Chemical Engineering Course
The Civil Engineering Course
The Mechanical Engineering Course
The Electrical Engineering Course

At graduation in any of these courses the student receives the degree of Bachelor of Science. The diploma indicates which course has been completed.

The Chemical Course

This course is designed for those who plan to become professional chemists and analysts, or teachers of chemistry. Attention is given to preparation for the work of the agricultural experiment station.

Lectures and recitations are closely associated with practical work in the laboratories. The student is drilled in the use of chemical apparatus, in accurate observation, and in careful interpretation of directions.

Eleven credits are required for the completion of the major, and a total of thirty for graduation.

Requirements for Graduation

FRESHMAN YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
French 3a	3	French 3b	2
English 3	3	English 4	3
Mathematics 2, 4	5	Mathematics 2, 6a	5
Chemistry 1	2	Chemistry 2	3
Chemistry 3, †2	1	Chemistry 4, †2	1
Drawing 1, †4	2	English 1b	1
English 1a	1	Military 1, †5	2 1-2
Military 1, †5	2 1-2		17 1-2
	19 1-2		

SOPHOMORE YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
German 1	5	German 2	5
Physics 12	5	Physics 5, *5	2
Chemistry 5	2	Chemistry 6	3
Chemistry 14, †8	4	Chemistry 15, †8	4
English 2a	1	English 2b	1
Biology 1	3	Elective	2
	20		17

JUNIOR YEAR

German 3a	3	German 3b	2
Chemistry 16, 18, †12	6	Chemistry 8	2
Chemistry 7	3	Chemistry 19, †15	7 1-2
Biological Chemistry 1	5	Elective	6
Elective	2		17 1-2
	19		

SENIOR YEAR

Chemistry 12, 20, 21, †14	7	Chemistry 24b	2
Chemistry 23	3	Chemistry 22, 25b, 28, †15	7 1-2
Chemistry 24a	2	Chemistry 13	3
Zoölogy 4	2	Elective	5
Geology 1	3		17 1-2
Elective	5		
	22		

At graduation the student receives the degree of Bachelor of Science. Upon the completion of one year's prescribed work in residence, including the presentation of a satisfactory thesis he receives the degree of Master of Science.

The Chemical Engineering Course

This course is especially designed for those who intend to enter industries that require a more or less extensive knowledge of chemistry,

as well as of applied mathematics and some of the engineering studies, thus fitting them for positions as chemists or managers of manufacturing plants.

FRESHMAN YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
French 3a	3	French 3b	2
English 3	3	English 4	3
Mathematics 2, 4	5	Mathematics 2, 6a	5
Chemistry 1	2	Chemistry 2	3
Chemistry 3, †2	1	Chemistry 4, †2	1
English 1a	1	English 1b	1
Drawing 2, †4	2	Drawing 2, †4	2
Military 1, †5	2 1-2	Military 1, †5	2 1-2
	19 1-2		19 1-2

SOPHOMORE YEAR

Chemistry 5	2	Chemistry 6	3
Chemistry 14, †6	3	Chemistry 15, †6	3
Physics 1	5	Physics 2	3
Drawing 9, *4	1 1-3	Physics 5, *5	2
Modern Language	3	Modern Language	3
English 2a	1	English 2b	1
Mathematics 6b, 7	5	Mathematics 8	5
Physical Training 1, *2	2-3	Physical Training 2, *2	2-3
	22		20 2-3

JUNIOR YEAR

Chemistry 7	3	Chemistry 8	2
Chemistry 16, 18, †8	4	Chemistry 19, †8	4
Mechanical Engineering 1b, *4	1 1-3	Mechanical Engineering 4	3
Mechanics 5	5	Mechanical Engineering 10	2
Elective	3	Mechanical Engineering 2, *4	1 1-3
		Mechanics 6	5
	16 1-3		17 1-3

SENIOR YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Chemistry 24a	2	Chemistry 24b	2
Chemistry 20, 25, †8	4	Chemistry 22, 25b, †8	4
Mechanical Engineering 11	3	Chemistry 32	2
Mechanical Engineering 26, †3	11-2	Mechanical Engineering 5b, *4	11-3
Electrical Engineering 10a	3	Elective	8
Electrical Engineering 11a, †4	2		
Elective	11-2		17 1-3
	17		

The Civil Engineering Course

The object of the course in Civil Engineering is to give the student as thorough a knowledge as possible of the principles underlying the profession. It is not possible in the time usually devoted to a college course to take up more than the most important technical subjects, hence the time devoted to those subjects designed to cultivate and broaden the mind is necessarily small. The attempt is made, however, to give the student not only a technical education, but to at least form the basis for a liberal one as well.

The attention of the student is directed to the fact that the scope of civil engineering is so broad that he may never expect to become expert in all of its branches, and that on the completion of his course he should obtain employment in that branch for which he seems best adapted.

It is impressed upon his mind that the granting of his bachelor's degree does not create him an engineer. It simply indicates that he has received the technical mental training which will fit him to follow the profession, and that he must begin at the bottom of the ladder of practice in order to obtain experience and judgment, without which he can never become successful.

The methods of instruction are recitations, lectures, original problems, work in the testing laboratories, field practice, and designing. Effort is made to acquaint the student with the best engineering practice, and with the standard engineering literature. During each year it is the practice to have several lectures by engineers from other institutions and from the engineering world. These lectures tend to increase the interest of the student, and to bring him in touch with men outside of his institution.

The engineering building contains recitation rooms, designing rooms, testing laboratories, drawing rooms, instrument rooms, and a filing and reference room, and is well equipped with apparatus.

The work of the first year is the same for all engineering students, especial attention being paid to mathematics and English. The technical work begins in the fall semester of the second year with field work and the study of surveying. This technical work is gradually increased, until the last year when it is nearly all professional. In the spring semester of the third year the student is required to choose between two optional lines of study. Option 1 consists of work in Hydraulic Engineering, while Option 2 consists of work in Railroad Engineering. The time devoted to each option is the same. Owing to the available facilities of the department not more than sixty per cent of the number of students in a class are allowed to select either option. A written statement is required from each student before the close of the fall semester giving his reasons for his selection. The head of the department reserves the right to make the final division.

The following subjects constitute the regular four years' course. Certain general subjects which are given as requirements, may, on presentation of satisfactory reasons to the head of the department, be omitted and others substituted.

Requirements for Graduation

FRESHMAN YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Chemistry 1	2	Chemistry 2	3
Chemistry 3, †2	1	Chemistry 4, †2	1
English 1a	1	English 1b	1
English 3	3	English 4	3
Drawing 1, *6	2	Drawing 2, *6	2
Modern Language	3	Modern Language	2
Mathematics 2, 4	5	Mathematics 2, 6a	5
Military 1, †5	2 1-2	Military 1, †5	2 1-2
	19 1-2		19 1-2

SOPHOMORE YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Civil Engineering 1a, 2a, *8	2 2-3	Civil Engineering 2b, 2c, *5.	1 2-3
English 2a	1	Civil Engineering 3a, 4a	3
Mathematics 6b, 7	5	English 2b	1
Modern Language	3	Mathematics 8	5
Physics 1	5	Modern Language	2
Drawing 3, *6	2	Drawing 4, *6	2
Physical Training 1, *2	2-3	Physics 2	3
		Physics 5, *5	2
	19 1-3	Physical Training 2, *2	2-3
			20 1-3

JUNIOR YEAR

Civil Engineering 3b	1	Civil Engineering 6, *6	2
Civil Engineering 4b, 4c, *6	2	Civil Engineering 9a	1
Civil Engineering 5	2	Civil Engineering 8 or Civil Engineering 19	2
Economics 1a	2		
Mechanics 5	5	Civil Engineering 10	3
Mathematics 10	3	Civil Engineering 21	2
Physics 9, *2 1-2	1	Civil Engineering 9b	2
Physics 19	1	Mechanics 6	5
Geology	2	Economics 2a	2
	19		19

SENIOR YEAR

Civil Engineering 11, †4	2	Civil Engineering 13a	3
Civil Engineering 12	3	Civil Engineering 13b	2
Civil Engineering 20	2	Civil Engineering 15, †6	3
Civil Engineering 14, †12	6	Civil Engineering 17 and Electrical Engineering 12b or Civil Engineering 24 and 25b	4
Civil Engineering 16 or Civil Engineering 25a	2		
History 5	2	Civil Engineering 26 and Mechanical Engineering 25	†4 2
	17	Economics 6	3
			17

At graduation the student receives the degree of Bachelor of Science. Upon the completion of one year's prescribed work in residence, including the presentation of a satisfactory thesis, he receives the degree of Master of Science. Three years after graduation, upon the presentation of a satisfactory thesis and proofs of professional work, he may receive the degree of Civil Engineer.

The Mechanical Engineering Course

The prescribed studies in this course are intended to give the student a fundamental engineering training. Care has been taken so to arrange the sequence of subjects that the instruction given may have the greatest efficiency. Each course should be completed in its prescribed order. Variation from the stated order may only be made in important cases.

The first two years are preparatory for the professional work. In this time the prescribed courses in mathematics and language are completed. The student who would be successful in his professional studies should master thoroughly the required mathematics. A good reading knowledge of German or French should be acquired in this time, as many of the more important engineering papers first appear in those languages.

Time limitation prevents much specializing in the professional subjects of the last two years, other than by choosing among the various main branches of Civil, Electrical, or Mechanical engineering. Arrangements have been made, however, to allow a student of mechanical engineering to cover more ground in electrical engineering if his standing admits of the extra work.

The professional subjects should train a student to think for himself and have self-reliance in undertaking new work, as well as give him professional information. The general subjects prescribed are considered of especial importance to a student of applied science.

The tabulated list shows the prescribed subjects and the time given to each. More detailed information may be had from the brief descriptions of each subject, found under "Courses of Instruction."

Requirements for Graduation

Freshman Year

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Chemistry 1	2	Chemistry 2	3
Chemistry 3, †2	1	Chemistry 4, †2	1
English 1a	1	English 1b	1
English 3	3	English 4	3
Modern Language	3	Modern Language	2
Mathematics 2, 4,	5	Drawing 2, *6	2
Drawing 1, *6	2	Mathematics 2, 6a	5
Military 1, †5	2 1-2	Military 1, †5	2 1-2
	19 1-2		19 1-2

Sophomore Year

English 2a	1	English 2b	1
Drawing 3, *6	2	Drawing 4, *6	2
Mathematics 6b, 7	5	Physics 2	3
Physics 1	5	Physics 5, *5	2
Modern Language	3	Mathematics 8	5
Mechanical Engineering 1, *6	2	Modern Language	2
Physical Training 1, *2	2-3	Mechanical Engineering 2, *4	1 1-3
		Mechanical Engineering 4	3
	18 2-3	Physical Training 2, *2	2-3
			20

Junior Year

Mechanical Engineering 24	1	Mechanical Engineering 5b, *9	3
Mechanical Engineering 5a *6	2	Mechanical Engineering 8	3
Mechanical Engineering 9	2	Mechanical Engineering 10	2
Mechanical Engineering 3, *3 1-2	1 1-6	Mechanical Engineering 15a, †2	1
Mechanics 5	5	Mechanical Engineering 19, *4	1 1-3
Economics 1a	2	Mechanics 6	5
Physics 9, *5	2	Economics 2a	2
Elective	3		
	18 1-6		17 1-3

SENIOR YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Mechanical Engineering 11..	3	Mechanical Engineering 7...	2
Mechanical Engineering 12, *6	2	Mechanical Engineering 15c, †4	2
Mechanical Engineering 15b, †2	1	Mechanical Engineering 16..	2
Mechanical Engineering 18,*6	2	Mechanical Engineering 17, *6	2
Civil Engineering 1b.....	2	Mechanical Engineering 13..	2
Civil Engineering 2a.....	1-2	Mechanical Engineering 20..	1
Civil Engineering 22.....	1	Economics 6.....	3
Civil Engineering 23.....	2	Electives	3
Electrical Engineering 10a..	3		17
Electrical Engineering 11a, †4	2		
	18 1-2		

At graduation the student receives the degree of Bachelor of Science. Upon the completion of one year's prescribed work in residence, including the presentation of a satisfactory thesis, he receives the degree of Master of Science. Three years after graduation, upon the presentation of a satisfactory thesis and proofs of professional work, he may receive the degree of Mechanical Engineer.

The Electrical Engineering Course

This course is intended to provide a thorough preparation in the scientific principles involved in the practice of electrical engineering; to explain and illustrate the application of these principles to the design, construction, installation, and running of apparatus with which the electrical engineer has to deal, and to give practice and experience in the care and running of the same. In addition to this purely electrical work the student takes up carpentry, forge work, machine work, mechanical drawing, mathematics, physics, mechanics, steam engineering, and other subjects allied to engineering work. The general courses, required or elective, include English language, logic, psychology, history, political economy, education, sociology, and constitutional law.

The equipment in the electrical laboratory has been developed to parallel practical conditions as far as possible and consists essentially

of a 20 kilowatt electrical substation converting from a three phase, 60 cycle, 115 volt alternating current system to direct current, by means of rotary converters and belted alternating current motors driving direct current generators. In addition to voltmeters, ammeters, and wattmeters for both direct and alternating current, the equipment includes circuit breakers, various types of transformers, three 7½ kilowatt special auto-transformers giving variable pressure for experimental work and voltages for operating two and three phase rotary converters, a self starting rotary coverter, a three phase generator, a three phase revolving field synchronous motor, a three phase variable speed induction motor, a single phase synchronous motor, a single phase self starting induction motor, direct current generators and motors, and laboratory telephone equipment.

Requirements for Graduation

Freshman Year

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Chemistry 1	2	Chemistry 2	3
Chemistry 3, †2	1	Chemistry 4, †2	1
English 1a	1	English 1b	1
English 3	3	English 4	3
Drawing 1, *6	2	Drawing 2, *6	2
Modern Language	3	Modern Language	2
Mathematics 2, 4	5	Mathematics 4, 6a	5
Military 1, †5	2 1-2	Military 1, †5	2 1-2
	19 1-2		19 1-2

Sophomore Year

English 2	1	English 2	1
Drawing 3, *6	2	Drawing 4, *6	2
Mechanical Engineering 1b, *4	1 1-3	Mechanical Engineering 2, *4	1 1-3
Modern Language	3	Mechanical Engineering 4	3
Mathematics 6b, 7	5	Modern Language	2
Physics 1	5	Mathematics 8	5
Physical Training 1, *2	2-3	Physics 2	3
		Physics 5, *5	2
		Physical Training 2, *2	2-3
	18		20

JUNIOR YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Electrical Engineering 1a....	2	Electrical Engineering 1b....	3
Mechanics 5.....	5	Electrical Engineering 2b, † 2	1
Mechanical Engineering 5c, * 4	1 1-3	Mechanics 6.....	5
Physics 11, * 7 1-2.....	3	Mechanical Engineering 5b, * 4	1 1-3
Economics 1a.....	2	Mechanical Engineering 8..	3
Economics 7a or History 5	2	Mechanical Engineering 10..	2
Elective	3 2-3	Economics 5.....	2
	19		17 1-3

SENIOR YEAR

Electrical Engineering 3a....	3	Electrical Engineering 3b....	2
Electrical Engineering 4a....	2	Electrical Engineering 5b..	1 1-2
Electrical Engineering 5a, † 4	2	Electrical Engineering 7b....	2
Electrical Engineering 6a, † 4	2	Electrical Engineering 6b, † 4	2
Mechanical Engineering 26, † 3	1 1-2	Electrical Engineering 8b, * 4	1 1-3
Mechanical Engineering 11..	3	Economics 6.....	3
Civil Engineering 1a, 2a....	2 1-2	Mechanical Engineering 19, * 4	1 1-3
Civil Engineering 23.....	2	Electrical Engineering 4b....	1
Civil Engineering 22.....	1	Elective	3 1-6
	19		17 1-3

At graduation the student receives the degree of Bachelor of Science. Upon the completion of one year's prescribed graduate work in residence, including the presentation of a satisfactory thesis, he receives the degree of Master of Science. Three years after graduation, upon the presentation of a satisfactory thesis and proofs of professional work, he may receive the degree of Electrical Engineer.

COLLEGE OF PHARMACY

FACULTY OF INSTRUCTION

GEORGE EMORY FELLOWS, PH. D., L. H. D., LL. D.
President of the University

JAMES NORRIS HART, C. E., M. S., SC. D.
Professor of Mathematics and Astronomy and Dean of the University

ALFRED BELLAMY AUBERT, M. S. *Professor of Chemistry*

LUCIUS HERBERT MERRILL, B. S., SC. D.,
Professor of Biological and Agricultural Chemistry

FREMONT LINCOLN RUSSELL, B. S., V. S.
Professor of Bacteriology and Veterinary Science.

HORACE MELVYN ESTABROOKE, M. A. *Professor of English*

JAMES STACY STEVENS, M. S., LL. D. *Professor of Physics*

GILMAN ARTHUR DREW, PH. D. *Professor of Biology*

WILBUR FISK JACKMAN, B. S., PH. C. *Professor of Pharmacy*

RALPH KNEELAND JONES, B. S. *Librarian*

JACOB BERNARD SEGALL, PH. D.
Professor of Romance Languages

WALTER STEVENS BROWN
Professor of Military Science and Tactics

MINTIN ASBURY CHRYSLER, PH. D.
Associate Professor of Botany

GUY ANDREW THOMPSON, M. A., *Assistant Professor of English*

ANDREW PAUL RAGGIO, PH. D.
Assistant Professor of Romance Languages

HARLEY RICHARD WILLARD, M. A.
Assistant Professor of Mathematics

LEON ELMER WOODMAN, M. A. *Assistant Professor of Physics*

WINDSOR PRATT DAGGETT, PH. B.
Assistant Professor of Public Speaking

WALTER EVERETT PRINCE, M. A. *Instructor in English*

ELMER EARL MOOTS, B. C. E., M. S. *Instructor in Mathematics*

ROBERT EDMUND CLAYTON, B. S. *Instructor in Chemistry*

GLADYS ETHEL FELLOWS, B. A.	*Instructor in Romance Languages*
JAMES SEYMOUR, Ph. C., B. S.	*Instructor in Chemistry*
HENRY LEWIS SWETT, B. A.	*Instructor in Mathematics*
WILLIS FLYE WASHBURN, B. S.	*Instructor in Chemistry*
LOWELL JACOB REED, B. S.	*Instructor in Mathematics*
GEORGE EDWARD PEARSON, M. A.	*Instructor in English*
HARRY NEWTON CONSER, M. S., M. A.	*Instructor in Botany*
EDITH MAYNARD WALLACE, M. A.	*Instructor in Biology*
JOSEPH LEWIS COON, Ph. B.	*Tutor in Physics*
EDWIN ALLEN GARLOCK, B. S.	*Tutor in Physics*
ALBERT GUY DURGIN, B. S.	*Assistant in Chemistry*

GENERAL INFORMATION

The College of Pharmacy comprises:
The Pharmacy Course
The Short Course in Pharmacy

The Pharmacy Course

This course is offered in response to a demand for a thorough training, both general and technical, for those who are to become pharmacists. It aims to combine a broad general culture and a thorough preparation along its special lines, with the design of affording both the intellectual development necessary for the well rounded professional or business man, and the necessary technical training. To this end, it includes the same instruction in modern languages, civics, and the sciences, as is offered in other college courses. Thirty credits are required for graduation.

Those who intend to fit themselves for pharmaceutical work are urged to consider carefully the superior advantages of this course. The growing importance of the biological, sanitary, and medical sciences, and the pharmacist's relation to them, make it increasingly necessary to his success that he be not only a well trained man in the technical branches but an educated man in the broadest sense.

Instruction in pharmaceutical studies is given by means of lectures, recitations, and tests, supplemented by work in the laboratories of chemistry and pharmacy. It embraces qualitative, quantitative, and volumetric analysis, toxicology, bacteriology, prescriptions, the preparation of pharmaceutical compounds, and original investigations.

The library contains valuable reference literature in chemistry and pharmacy, and the best chemical and pharmaceutical journals.

Requirements for Graduation

Freshman Year

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
French 3a	3	French 3b	2
English 1a	1	English 1b	1
English 3	3	English 4	3
Chemistry 1	2	Chemistry 2	3
Chemistry 3, †2	1	Chemistry 4, †2	1
Mathematics 2, 4	5	Mathematics 1, 2	5
Military 1, †5	2 1-2	Military 1, †5	2 1-2
	17 1-2		17 1-2

Sophomore Year

French 4a	3	French 4b	3
Physics 12	5	Physics 5, *5	2
English 2a	1	English 2b	1
Chemistry 5	2	Chemistry 6	3
Chemistry 14, †8	4	Chemistry 15, †8	4
Biology 1	3	Botany 1	4
Zoölogy 4	2	Elective	1
	20		18

Junior Year

Chemistry 7	3	Chemistry 8	2
Chemistry 16, †8	4	Chemistry 19, †12	6
Biological Chemistry 1	5	Chemistry 21, †2	1
Botany 3	4	Chemistry 31	2
Pharmacy 5	2	Bacteriology 1, †6	3
Elective	2	Pharmacy 6	4
	20	Elective	2
			20

SENIOR YEAR

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Pharmacy 2	5	Pharmacy 4	5
Pharmacy 3, † 12	6	Pharmacy 9, † 5	2 1-2
Pharmacy 7	3	Pharmacy 10, † 10	5
Elective	4	Pharmacy 11	3
		Elective	4
	18		19 1-2

From courses in History, Philosophy, and Economics a total of at least five hours must be chosen.

The number of hours required and elected need not exceed 150, or 30 credits.

At graduation the student receives the degree of Bachelor of Science. Upon the completion of one year's prescribed work in residence, including the presentation of a satisfactory thesis, he receives the degree of Master of Science.

The Short Course in Pharmacy

This course, of two years, is designed for those who, for lack of time or for other reasons, are unable to take the course of four years. The more general educational studies of the full course are omitted, but as broad a range of subjects is offered as can be undertaken without sacrifice of thoroughness in the technical work. The course corresponds, in general, to the usual full course of pharmacy colleges. The work required of the student will occupy his whole time during the college year of nine months, and will usually exclude work in drug stores during term time. The brevity of this course does not warrant extending to other than advanced students the privilege of electives.

Requirements for Graduation

Freshman Year

Fall Semester		*Spring Semester*	
Subject	Hours	Subject	Hours
Chemistry 1	2	Chemistry 2	3
Chemistry 14, † 16	8	Chemistry 15, 19, † 10	5
Pharmacy 1	5	Chemistry 31	2
Pharmacy 5	2	Botany 6	3
		Pharmacy 6	4
	17		17

Sophomore Year

Chemistry 7	3	Chemistry 8	2
Botany 7	3	Chemistry 21, † 2	1
Pharmacy 2	5	Pharmacy 4	5
Pharmacy 3, † 12	6	Pharmacy 9, † 3	1 1-2
Pharmacy 7	3	Pharmacy 10, † 10	5
		Pharmacy 11	3
	20	Bacteriology 1, † 6	3
			20 1-2

Students who complete this course in a satisfactory manner receive the degree of Pharmaceutical Chemist.

COLLEGE OF LAW

FACULTY OF INSTRUCTION

GEORGE EMORY FELLOWS, PH. D., L. H. D., LL. D.
President of the University

WILLIAM EMANUEL WALZ, M. A., LL. B.
Dean, and Professor of Law

EDGAR MYRICK SIMPSON, B. A.
Assistant Professor of Real Property and Evidence

GEORGE HENRY WORSTER, LL. M.
Instructor in Sales and Corporations

BARTLETT BROOKS, B. A., LL. B.
Instructor in Contracts and Negotiable Paper

FOREST JOHN MARTIN, LL. B.
Resident Lecturer on Common Law Pleading and Maine Practice

HUGO CLARK, LL. M.
Resident Lecturer on Equity Pleading and Practice

CHARLES HAMLIN, M. A.
Lecturer on Bankruptcy and Federal Procedure

LUCILIUS ALONZO EMERY, M. A., LL. D.
Lecturer on Roman Law and Probate Law

LOUIS CARVER SOUTHARD, LL. D.
Lecturer on Medico-Legal Relations

RALPH KNEELAND JONES, B. S. *Librarian*

GENERAL INFORMATION

The College of Law was opened to students in 1898. It occupies since the beginning of 1908 the entire sixth story of the Exchange building, at the corner of State and Exchange streets, Bangor. In this city are held annually one term of the U. S. District Court, five terms of the Maine Supreme Judicial Court, one term of the Law Court, and daily sessions of the Municipal Court. The law library contains about 3,000

volumes, including the reports of the Supreme Court of the United States, Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Ohio, and the Court of Appeals of New York, the New York Common Law and Chancery Reports, the American Decisions, American Reports, American State Reports, the Complete Reporter System, the Lawyers' Reports Annotated, all the Law Encyclopædias, and a considerable number of text-books, as also the English Reports, full verbatim reprint.

Admission

Graduates of any college or satisfactory preparatory school are admitted to the college as candidates for the degree of Bachelor of Laws without examination. Other applicants must give satisfactory evidence of the necessary educational qualifications for the pursuit of the required course of study. These will be fixed in each case according to the rules of the Association of American Law Schools, of which association this school is a member. Attention is called to a change made in these rules by the Association of American Law Schools at its meeting at Narragansett Pier, R. I., in August, 1905. The following resolution was then passed:

"Section one of Article VI of the Articles of Association shall be amended so that it will read as follows:

"I. It shall require of all candidates for its degree at the time of their admission to the school the completion of a four years' high school course, or such a course of preparation as would be accepted for admission to the state university, or to the principal colleges and universities in the state where the law school is located; provided, that this requirement shall not take effect until September, 1907."

Special students, not candidates for a degree, will be admitted without examination, and may pursue any studies for which they are prepared.

Students from other schools which are members of the Association of American Law Schools, are admitted to classes in this institution corresponding to classes in the schools from which they come, upon the production of a certificate showing the satisfactory completion of the prior work in such schools.

Students from law offices otherwise qualified are admitted to advanced standing upon passing a satisfactory examination upon the earlier subjects of the course.

Members of the bar of any state may be admitted to the senior class, without examination, as candidates for the degree of Bachelor of Laws, while graduate students may take one of the two courses leading to the degree of Master of Laws.

Methods of Instruction

The College is not committed exclusively to any one method of instruction, and recognizes the great value of lectures by able men and the profit to be found in the use of standard text-books; but the greatest stress is placed upon the study of selected cases, and most of the work is carried on in this way. It is believed that through the case the student can best come at the controlling principles of the law, and that in no other way can he get so vital a comprehension of them. "Through the case to the principle," may, perhaps, adequately indicate the standpoint of the school in the matter of method.

Particular stress is placed upon the Practice Court, which is held once a week as a part of the work of the college, and in which every student is required to appear regularly. The questions of law are in all instances made to arise from the pleadings prepared by the students, and briefs summarizing the points involved and the authorities cited, are submitted to the presiding judge.

The aim and spirit of the college are eminently practical, the purpose being to equip men for the everyday duties of the practicing attorney.

Course of Study

The course of study covers three years, in accordance with the requirements for admission to the bar in the State of Maine. The college year consists of thirty-two weeks, and is divided into the fall, winter, and spring terms, of eleven, ten, and eleven weeks respectively.

Expenses

The annual tuition fee is $70, $23.33 at the beginning of each term, payable in advance. Of this sum $10 is a library charge. The graduation fee is $10. There are no other charges.

Board and furnished rooms, with light and heat, may be obtained in the most convenient locations, at a price ranging from $3 to $7 a week. It is believed that expenses in this department, as well as in other departments of the University, are lower than in any other New England college.

Degrees

At the completion of the three years' course the degree of Bachelor of Laws is conferred. Upon the completion of one year's prescribed work in residence, or two years' in absence, including the presentation of a satisfactory thesis and examination at the University, the degree of Master of Laws is granted.

Attorneys-at-law who have been actively engaged in practice at the bar for not less than five years, and attorneys who hold a college degree and have practised for not less than two years, may, on presentation of a recommendation from one of the justices of the highest court of their state, be also admitted to the course leading to the master's degree.

COURSES OF INSTRUCTION

1. AGENCY.—Text-book, Huffcut's cases on Agency. *Three hours a week.* Spring term. MR. WORSTER.

2. BANKRUPTCY.—Lectures. *Two hours a week.* Winter term. GENERAL HAMLIN.

3. CARRIERS.—Text-book. McClain's Cases on Carriers. *One hour a week.* Fall term. PROFESSOR SIMPSON.

4. CARRIERS.—A continuation of course 3. *Three hours a week.* Winter term. PROFESSOR SIMPSON.

5. COMMON LAW PLEADING.—Lectures. *Two hours a week.* Winter term. MR. MARTIN.

6. COMMON LAW PLEADING.—A continuation of course 5. *One hour a week.* Spring term. MR. MARTIN.

7. CONFLICT OF LAWS.—Dwyer's Cases. *Three hours a week.* Spring term. PROFESSOR SIMPSON.

8. CONSTITUTIONAL LAW.—Boyd's Cases. *Two hours a week.* Spring term. MR. WORSTER.

9. CONTRACTS.—Keener's Cases on Contracts. *Four hours a week.* Fall term. MR. BROOKS.

10. CONTRACTS.—A continuation of course 9. *Three hours a week.* Winter term. MR. BROOKS.

11. CONTRACTS.—A continuation of course 10. *Two hours a week.* Spring term. MR. BROOKS.

12. Criminal Law.—Beale's Cases on Criminal Law. *Two hours a week.* Winter term. Professor Simpson.

13. Criminal Law.—A continuation of course 12. *Three hours a week.* Spring term. Professor Simpson.

14. Damages.—Beale's Cases on Damages. *Three hours a week.* Winter term. Mr. Worster.

15. Domestic Relations.—Smith's Cases on Persons. *Three hours a week.* Fall term. Professor Simpson.

16. Equity Jurisprudence.—Bispham on Equity Jurisprudence and Shepard's Cases on Equity. *Four hours a week.* Fall term. Professor Walz.

17. Equity Jurisprudence.—A continuation of course 16. *Three hours a week.* Winter term. Professor Walz.

18. Equity Pleading.—Lectures. *Two hours a week.* Winter term. Mr. Clark.

19. Evidence.—Thayer's Cases. *Four hours a week.* Fall term. Professor Simpson.

20. Evidence.—A continuation of course 19. *Three hours a week.* Winter term. Professor Simpson.

21. Evidence.—Lectures. *Number of hours not fixed.* Winter term. Mr. ————

22. Executors and Administrators.—Lectures. *One hour a week.* Spring term. Professor Simpson.

23. Federal Courts.—Lectures. *One hour a week.* Spring term. Professor Walz.

24. General Review.—Gardner's Review. *One hour a week.* Fall term. Professor Walz.

25. General Review.—Gardner's Review. *One hour a week.* Winter term. Professor Walz.

26. General Review.—Gardner's Review. *One hour a week.* Spring term. Professor Walz.

27. History of Law.—Lectures. *One hour a week.* Fall term. Professor Walz.

28. Insurance.—Woodruff's Cases. *Three hours a week.* Spring term. Mr. Worster.

29. International Law.—Lectures. *One hour a week.* Fall term. Professor Walz.

30. Maine Practice.—Lectures. *One hour a week.* Spring term. Mr. Martin.

31. Medico-Legal Relations.—Lectures. *About six hours.* Spring term. Mr. Southard.

32. Municipal Corporations.—Smith's Cases. *Three hours a week.* Winter term. Professor Walz.

33. Negotiable Paper.—Huffcut's Cases. *Two hours a week.* Winter term. Mr. Brooks.

34. Negotiable Paper.—A continuation of course 33. *Three hours a week.* Spring term. Mr. Brooks.

35. Partnership.—Ames's Cases. *Four hours a week.* Spring term. Professor Walz.

36. Private Corporations.—Smith's Cases. *Four hours a week.* Fall term. Mr. Worster.

37. Private Corporations.—A continuation of course 36. *Three hours a week.* Winter term. Mr. Worster.

38. Probate Law and Practice.—Lectures. *About ten hours.* Spring term. Mr. Chief Justice Emery.

39. Real Property.—Tiedeman on Real Property. *Four hours a week.* Fall term. Professor Simpson.

40. Real Property.—A continuation of course 39. *Three hours a week.* Winter term. Professor Simpson.

41. Real Property.—Finch's Cases on the Law of Property in Land. *Four hours a week.* Spring term. Professor Simpson.

42. Roman Law.—Lectures. *About ten hours.* Spring term. Mr. Chief Justice Emery.

43. Sales.—Burdick's Cases. *Two hours a week.* Fall term. Mr. Worster.

44. Sales.—A continuation of course 43. *Two hours a week.* Winter term. Mr. Worster.

45. Suretyship.—Ames's Cases. *Two hours a week.* Fall term. Mr. Worster.

46. Suretyship.—A continuation of course 45. *Two hours a week.* Winter term. Mr. Worster.

47. Torts.—Ames and Smith's Cases. *Four hours a week.* Fall term. Professor Walz.

48. Torts.—A continuation of course 47. *Three hours a week.* Winter term. Professor Walz.

49. Torts.—A continuation of course 48. *Two hours a week.* Spring term. Professor Walz.

50. What to do in Court.—Lectures. *About ten hours.* Spring term. Mr. Chief Justice Emery.

51. Wills.—Chaplin's Cases. *Three hours a week.* Spring term. Mr. Worster.

THE MAINE AGRICULTURAL EXPERIMENT STATION

FACULTY OF INVESTIGATION

GEORGE EMORY FELLOWS, Ph. D., L. H. D., LL. D.
President of the University

THE STATION STAFF.

CHARLES DAYTON WOODS		*Director*
BIOLOGY	RAYMOND PEARL	*Biologist*
	FRANK MACY SURFACE	*Associate*
	FREMONT LINCOLN RUSSELL	*Assistant*
	MAYNE ROSE CURTIS	*Assistant*
	WALTER ANDERSON	*Poultryman*
	LOTTIE ESTELLE McPHETERS	*Computer*
CHEMISTRY	JAMES MONROE BARTLETT	*Chemist*
	HERMAN HERBERT HANSON	*Associate*
	JOANNA CARVER COLCORD	*Assistant*
	JOSEPH FARRINGTON MERRILL	*Assistant*
	REX CARLETON GELLERSON	*Inspector*
ENTOMOLOGY	EDITH MARION PATCH	*Entomologist*
	ALICE WOODS AVERILL	*Laboratory Assistant*
PLANT PATHOLOGY	WARNER JACKSON MORSE	*Pathologist*
	CHARLES EDWARD LEWIS	*Associate*
	FRANK DELMONT STERRY	*Laboratory Assistant*
ROYDON LINDSAY HAMMOND		*Seed Analyst and Photographer*
ANNIE MARIE SNOW		*Clerk and Stenographer to the Director*
BLANCHE FOLSOM POOLER		*Stenographer*
HENRY ATLEIGH MILLETT		*Meteorological Observer and Janitor*

ESTABLISHMENT OF THE STATION

The Maine Fertilizer Control and Agricultural Experiment Station, established by Act of the Legislature approved March 3, 1885, began its work in April of that year in quarters furnished by the College. After this Station had existed for two years, Congress passed what is known

as the Hatch Act, establishing agricultural experiment stations in every state. This grant was accepted by the Maine Legislature by an Act approved March 16, 1887, which established the Maine Agricultural Experiment Station as a department of the University. The reorganization was effected in June, 1887, but work was not begun until February 16, 1888. In 1906 Congress passed the Adams Act for the further endowment of the stations established under the Hatch Act.

GOVERNMENT OF THE STATION

By authority of the Trustees the affairs of the Station are considered by the Station Council, (see page 17) composed of the President of the University, three members of the Board of Trustees, the Director of the Station, the heads of the various departments of the Station, the Commissioner of Agriculture, and one member each from the State Pomological Society, the State Grange, and the State Dairyman's Association. The recommendations of the Council are referred to the Trustees for final action. The Director is the executive officer of the Station, and the other members of the staff carry out the lines of research that naturally come under their departments.

INCOME

The income of the Station for 1908-9 is about $37,000; $15,000 of which comes from the Hatch fund; $11,000 from the Adams fund; $9,000 from state appropriations including feeding stuffs inspection, fertilizer inspection, food and drug inspection, and seed inspection; about $4,000 from fertilizer inspection fees; $1,000 from the United States Department of Agriculture for co-operative experiments with poultry; and about $1,000 from miscellaneous sources.

THE OBJECT

The purpose of the experiment stations is defined in the Act of Congress establishing them as follows:

"It shall be the object and duty of said experiment stations to conduct original researches or verify experiments on the physiology of plants and animals; the diseases to which they are severally subject, with the remedies for the same; the chemical composition of usful plants at their different stages of growth; the comparative advantages of rotative cropping as pursued under a varying series of crops; the capacity of new plants or trees for acclimation; the analysis of soils and water; the chemical composition of manures, natural and artificial, with experiments designed to test their comparative effects on crops of different kinds;

the adaptation and value of grasses and forage plants; the composition and digestibility of the different kinds of food for domestic animals; the scientific and economic questions involved in the production of butter and cheese; and such other researches or experiments bearing directly on the agricultural industry of the United States as may in each case be deemed advisable, having due regard to the varying conditions and needs of the respective states or territories."

The work that the Experiment Station can undertake from the Adams Act fund is more restricted and can "be applied only to paying the necessary expenses of conducting original researches or experiments bearing directly on the agricultural industry of the United States, having due regard to the varying conditions and needs of the respective states and territories."

Any resident of Maine concerned in agriculture has the right to apply to the Station for any assistance that comes within its province.

EQUIPMENT

Most of the Station offices and laboratories are in Holmes Hall, described on page 21. The Station is well equipped in laboratories and apparatus, particularly in the lines of chemical, entomological, horticultural, pomological, vegetable pathological, and poultry investigations. Its poultry plant is probably the most complete of that of any experiment station in the country. It has extensive collections illustrating the botany and entomology of the state. It has a library of about 3,000 volumes, chiefly agricultural and biological journals, and publications of the various experiment stations.

INVESTIGATIONS

The Station continues to restrict its work to a few important lines, believing that it is better for the agriculture of the State to study thoroughly a few problems than to spread over the whole field of agricultural science. It has continued to improve its facilities and segregate its work in such a way as to make it an effective agency for research in agriculture. Prominent among the lines of investigation are studies upon the food of man and animals, the diseases of plants and animals, breeding of plants and animals, orchard and field experiments, poultry investigations, and entomological research. Some of these are in co-operation with bureaus of the United States Department of Agriculture. Field experiments with crops and orchards are carried on, in the parts of the State where the crop in question is a leading industry, on private land in co-operation with the owners.

INSPECTIONS

The inspection of food and drugs, the inspection of fertilizers, the inspection of concentrated commercial feeding stuffs, the inspection of agricultural seeds, and the testing of the graduated glassware used in creameries, are entrusted to the Station through its director, who is responsible for the execution of the public laws relating to these matters. The cost of the fertilizer inspection is borne by a brand tax, that of the feeding stuff, food and drugs, and seed inspections by a State appropriation, and that of chemical glassware by a charge for calibration.

DISSEMINATION OF INFORMATION

The Station publishes the account of its work in bulletin form. The bulletins for a year form a volume of about 250 pages and make up the annual report. Bulletins which contain matter of immediate value to practical agriculture are sent free of cost to the entire mailing list of the Station. On request, the name of any resident of Maine will be placed on the mailing list.

Newspaper bulletins on special topics are published from time to time as occasion demands. These are very generally printed by the press of the State and the agricultural papers of the country.

COMMENCEMENT

The Commencement exercises of 1908 were as follows:

Sunday, June 7: Baccalaureate Address, by Professor Edward Alsworth Ross of the University of Wisconsin.

Monday, June 8: University Convocation, including reports of departments and student enterprises, and the awarding of prizes; Class Day exercises; President's Reception.

Tuesday, June 9: Receptions by the various fraternities; Alumni Luncheon; Alumnæ Luncheon; Phi Kappa Phi Initiation; Phi Kappa Phi address, by Superintendent Andrew Sloane Draper of New York.

Wednesday, June 10: Commencement Exercises; Commencement Dinner; Business Meeting of the Alumni Association; Commencement Ball.

DEGREES CONFERRED

College of Agriculture

Joshua Swett Irish, B. S. in Agriculture.....Gorham
Samuel Barry Locke, B. S. in Forestry.....West Paris
Perley Fiske Skofield, B. S. in Agriculture.....Houlton
Raymond Judson Smith, B. S. in Forestry.....Skowhegan

College of Arts and Sciences

Anna Coffin Bean, B. S. in Chemistry.....Waltham, Mass.
Claude Boyle, B. S. in Chemistry.....Dover
Sarah Ellen Brown, B. A. in Greek.....Old Town
Daniel Chase, B. A. in Mathematics.....Baring
Owen Oscar Dow, B. S. in Economics.....Hiram
Elizabeth Read Estabrooke, B. A. in English.....Orono
Alice Belle Farnsworth, B. A. in Germanic Languages....West Sullivan
Raymond Fellows, B. A. in Economics.....Bucksport
Thomas Whitmore Fessenden, B. A. in Philosophy [Ph. B., Taylor University, 1902].....Bangor

Bell Curry Harris, B. A. in Germanic Languages.....Sherman Mills
Ballard Freeze Keith, B. A. in Latin.....Old Town
Stacy Clifford Lanpher, B. A. in Germanic Languages.....Sebec
William Stephen McNamara, B. S. in Romance Languages
Millville, Mass.
Anne Margaret Merrill, B. A. in Romance Languages.....Auburn
William Francis Scammon, B. A. in English.....Berlin Mills, N. H.
Merle Alton Sturtevant, B. S. in Physics.....Hebron
Walter Linwood Sturtevant, B. S. in Chemistry.....Bangor

College of Pharmacy

Fred Ellward Bartlett, Ph. C.....Westbrook
Howard Gilson Bradish, Ph. C.....Calais
William Herbert Ormsby, Ph. C.....South Portland
Myron Herbert Ridlon, Ph. C.....Kezar Falls

College of Technology

Chester Howe Bean, B. S. in Civil Engineering.....Bethel
Arthur Lawrence Beedle, B. S. in Electrical Engineering..South Gardiner
Chester Howe Brownell, B. S. in Civil Engineering....Newport, R. I.
William Alfred Cobb, B. S. in Civil Engineering.....Auburn
Bernard Ira Collins, B. S. in Civil Engineering.....Haverhill, Mass.
Robert Lincoln Cummings, B. S. in Electrical Engineering....Gorham
Leon Snell Dixon, B. S. in Mechanical Engineering.....Orono
Clifford Lester Draper, B. S. in Electrical Engineering..Stoneham, Mass.
Albert Guy Durgin, B. S. in Chemistry.....Orono
Francis Philip Emery, B. S. in Mechanical Engineering.....Eastport
Harry Pope Eveleth, B. S. in Electrical Engineering.....Greenville
James Pitt Farnsworth, B. S. in Electrical Engineering.....Milbridge
Roy Haynes Fisher, B. S. in Civil Engineering.....Pepperell, Mass.
Ben Baker Fogler, B. S. in Mechanical Engineering.....Skowhegan
Robert Mower Foster, B. S. in Electrical Engineering.....Lisbon
Cecil Sumner French, B. S. in Electrical Engineering.....Kingfield
James Adrian Gannett, B. S. in Electrical Engineering.....Yarmouth
Arthur Snow Hanscon, B. S. in Civil Engineering....Leeds Junction
Grover Merrill Hardison, B. S. in Civil Engineering.....Caribou
William Andrew Hill, B. S. in Civil Engineering.....Winterport
Stanley Tyng Hilliard, B. S. in Mechanical Engineering....Old Town
George Jesse Hopkins, B. S. in Mechanical Engineering.....Bath
Joseph Jacobs, B. S. in Electrical Engineering....West Boylston, Mass.
Charles Arthur Johnson, B. S. in Civil Engineering..Berlin Mills, N. H.

John Thompson Kendrigan, B. S. in Civil Engineering..Rockland, Mass.
George Raymond Knight, B. S. in Electrical Engineering
North Waterford
Paul Libby, B. S. in Civil Engineering.....Somersworth, N. H.
Leslie Roland Lord, B. S. in Electrical Engineering..Poquonock, Conn.
Carlton Hambly Macomber, B. S. in Mechanical Engineering
Portsmouth, R. I.
Frederico Walter Matheas, B. S. in Civil Engineering.....Bangor
Claude Pitman Meserve, B. S. in Mechanical Engineering
North Bridgton
Earle Linwood Milliken, B. S. in Electrical Engineering.....Westbrook
Henry LeRoy Miner, B. S. in Chemistry.....Haverhill, Mass.
James Joseph Morrison, B. S. in Electrical Engineering.....Pembroke
Fred Constine Morton, B. S. in Electrical Engineering..South Windham
Howard Lewis Perkins, B. S. in Electrical Engineering.....Augusta
Robert Eaton Potter, B. S. in Civil Engineering.....Bath
Philip Increase Robinson, B. S. in Electrical Engineering...Waterville
Robert Kent Steward, B. S. in Civil Engineering.....Skowhegan
Searle Fowler Thomas, B. S. in Electrical Engineering.....Lincoln
Warren Dudley Trask, B. S. in Civil Engineering.....Augusta
Earle Nelson Vickery, B. S. in Electrical Engineering.....Pittsfield
Clarence McLellan Weston, B. S. in Civil Engineering.....Madison
Walter Edmund Wilbur, B. S. in Electrical Engineering.....Pembroke
Louis Carl Wood, B. S. in Civil Engineering.....Berlin, N. H.

College of Law

Charles Albert Gooding Blossom, LL. B.....New Bedford, Mass.
Frank Beaumont Burgess, LL. B.....Sangerville
Edward Burleigh Davidson, LL. B.....York Village
John Perley Dudley, LL. B.....Holden
Ralph Wentworth Goss, LL. B.....Berwick
Willard Packard Hamilton, LL. B. [B. A., Bates College, 1895]..Caribou
Charles Goodell Lewis, LL. B.....New Bedford, Mass.
James Davidson Maxwell, LL. B.....Bangor
Harry McDonald Nolan, LL. B.....Haverhill, Mass.
Frank Howard Purinton, LL. B. [B. A., Bates College, 1896]..Lewiston
Morton Howard Rideout, LL. B.....Bangor
Horace Denver Ridlon, LL. B.....Stetson
Ernest Linwood Seavey, LL. B.....Caribou
Carroll Brown Skillin, LL. B.....North Yarmouth
William Linscott Waldron, LL. B. [B. A., Colby College; M. A., University of Maine, 1906].....Waterville

ADVANCED DEGREES

Honorary

Merritt Caldwell Fernald, LL. D.....Orono
William David Gibbs, Sc. D.....Durham, N. H.
James Norris Hart, Sc. D.....Orono
John King Lord, LL. D.....Hanover, N. H.
Lucius Herbert Merrill, Sc. D.....Orono
Arthur Amos Noyes, LL. D.....Boston, Mass.
Payson Smith, LL. D.....Auburn
Louis Sebastian Walsh, LL. D.....Portland

IN COURSE

Master of Arts

Harold Milton Ellis, B. A., 1907 (English).....Hingham, Mass.
Hugh Finlay Graham, B. A., Bowdoin College, 1898 (Philosophy)
Patten
Ellen Marvin Ropes, B. A., Bryn Mawr College, 1902 (Germanic Languages) .....Bangor

Master of Science

Elmer Earl Moots, B. C. E., Highland Park College, 1906 (Mathematics)
Des Moines, Iowa

Master of Laws

John Buckley, LL. B., 1907.....Stafford Springs, Conn.
Carlos Clayton Heard, B.A., Yale University, 1896.....Biddeford
William Asbury Johnson, LL. B., 1905.....Milo

Civil Engineer

Rodney Clinton Davis, B. S. in Civil Engineering, 1903....Chicago, Ill.
Guy Alfred Hersey, B. S. in Civil Engineering, 1900.....Bangor

Electrical Engineer

William Edward Barrows, Jr., B. S. in Electrical Engineering, 1902
Chicago, Ill.
Ralph Henry Alton, B. S. in Electrical Engineering, 1905..Lynn, Mass.

DEGREES OUT OF COURSE

Francis Henry Bacon, B. S., of the Class of 1876.....Boston, Mass.
Edward Butler Pillsbury, B. S., of the Class of 1876.....Boston, Mass.
Abram Woodard Sargent, B. S., of the Class of 1888..New York, N. Y.

CERTIFICATES IN THE SCHOOL COURSE IN AGRICULTURE

Alfred Searles Cook.....Presque Isle
George Phillips Fogg.....Hull's Cove
Bernard Franklin Twitchell.....South Paris

PRIZES AWARDED

The various prizes were awarded last year as follows:

The Kidder Scholarship, to Walter Scott Merrill, Skowhegan.

The Western Alumni Association Scholarship, to Mary Kathleen Young, Greenville.

The New York Alumni Association Scholarship, to Francis George Wadsworth, Sanford.

The Boston Alumni Association Scholarship, to Dwight Augustus Woodbury, Beverly, Mass.

The Junior Exhibition Prize to Elton LaForrest Towle, Portland.

The Sophomore Declamation Prize, to Francis George Wadsworth, Sanford.

The Franklin Danforth Prize, to Perley Fiske Skofield, Houlton.

The Pittsburg Alumni Association Scholarship, to Howard Redman Miller, South Berwick.

The Kennebec County Prize, to Earle Linwood Milliken, Westbrook, and Henry LeRoy Miner, Haverhill, Mass.

The Pharmacy Prize, to William Herbert Ormsby, South Portland.

The Holt Prizes, to Albert Guy Durgin, Orono, First; Leon Snell Dixon, Orono, Second; Paul Libby, Somersworth, N. H., Third.

The Honorable E. B. Winslow Prize, to Albert Whiting Doolittle, Hackensack, N. J.

APPOINTMENTS

Speakers at the Junior Exhibition, May 20, 1908

Walter Lee Emerson, Lewiston; Florence Evelyn Harvey, Orono; Ballard Freese Keith, Old Town; Chase Mac Arthur, Milltown; Harold Arthur Rich, Bangor; Irene Clara Richardson, Old Town; Elton LaForrest Towle, Portland.

Speakers at the Sophomore Prize Declamation Contest, December 6, 1907

James Edmund Battles, Frankfort; Warren Harmon, Old Orchard; Ernest Lamb, Utica, N. Y.; Franklin William Pettey, Fall River, Mass.; Herbert Wilfred Pickup, Ipswich, Mass.; Ralph Woodbury Redman, Corinna; Francis George Wadsworth, Sanford; Thurlow Tracy Woodman, Sullivan Harbor.

Members of the Phi Kappa Phi

Sarah Ellen Brown, Old Town; Elizabeth Read Estabrooke, Orono; Ben Baker Fogler, Skowhegan; Cecil Sumner French, Kingfield; Joseph Jacobs, West Boylston, Mass.; Ballard Freese Keith, Old Town; Thomas Edward Leary, East Hampden; James Joseph Morrison, Pembroke; Fred Constine Morton, South Windham; Howard Lewis Perkins, Augusta; Perley Fiske Skofield, Houlton; Clarence McLellen Weston, Madison.

Seniors Receiving General Honors

Anna Coffin Bean, Waltham, Mass.; Sarah Ellen Brown, Old Town; Elizabeth Read Estabrooke, Orono; Ben Baker Fogler, Skowhegan; Cecil Sumner French, Kingfield; Joseph Jacobs, West Boylston, Mass.; Ballard Freese Keith, Old Town; Anne Margaret Merrill, Auburn; Fred Constine Morton, South Windham; Clarence McLellen Weston, Madison.

From the College of Law

Ernest Linwood Seavey, Boston, Mass.

Reported to the Secretary of War for Publication in the Next United States Army Register as the Most Distinguished Students in the Military Department

Joseph Jacobs, West Boylston, Mass.; Bernard Ira Collins, Haverhill, Mass.; Joshua Swett Irish, Gorham.

ALUMNI ADVISORY COUNCIL

MEMBERS AT LARGE

John M. Oak, B. S., 1873, Bangor, Maine	1913
Louis C. Southard, M. S., 1875, LL. D., Boston, Mass.	1913
Albert H. Brown, B. S., 1880, Old Town, Maine	1912
George H. Hamlin, C. E., 1873, Orono, Maine	1912
Edward H. Kelley, B. S., 1890, Brewer, Maine	1911
Paul D. Sargent, B. C. E., 1896, Augusta, Maine	1911
Charles S. Bickford, B. S., 1882, Belfast, Maine	1910
George E. Thompson, B. C. E., 1891, Orono, Maine	1910
Walter Flint, B. M. E., 1882, M. E., Port Deposit, Md	1909
To be elected later	1909

Representing the College of Agriculture

Whitman H. Jordan, B. S., 1875, Sc. D., LL. D., Geneva, N. Y.	1910

Representing the College of Arts and Sciences

Will R. Howard, B. S., 1882, Farmington, N. H.	1912

Representing the College of Law

Freeland Jones, LL. B., 1900, Bangor, Maine	1911

Representing the College of Pharmacy

To be elected later	1909

Representing the College of Technology

Nathan C. Grover, B. C. E., 1890, S. B., C. E., New York, N. Y.	1913

CATALOG OF STUDENTS

Major subjects are indicated as follows: Ag. Agriculture, Bc. Biological Chemistry, Bl. Biology, Ch. Chemistry, Ce. Civil Engineering, Ec. Economics, Ed. Education, Ee. Electrical Engineering, Eh. English, Fy. Forestry, Gm. German, Gk. Greek, Hy. History, Lt. Latin, Ms. Mathematics, Me. Mechanical Engineering, Pm. Pharmacy, Pi. Philosophy, Ps. Physics, Rm. Romance Languages.

GRADUATE STUDENTS

Clayton, Robert Edmund, B. S., Ch. University of Maine, 1907	*Bangor*	Bangor
Colcord, Joanna Carver, B. S., Ch. University of Maine, 1906	*Searsport*	Main St.
Durgin, Albert Guy, B. S. Ch. University of Maine, 1908	*Orono*	Middle St.
Farnsworth, James Pitt, B. S., Ee. University of Maine, 1908	*Milbridge*	College St.
Godfrey, Ethel, B. L. Eh. Smith College, 1901	*Bangor*	Bangor
Lorimer, Addison Benjamin, B. A., Eh. Colby College, 1888	*Bangor*	Bangor
Merrill, Anne Margaret, B. A., Gm. University of Maine, 1908	*Auburn*	Bennoch St.
Merrill, Joseph Farrington, B. S., Bc. University of Maine, 1907	*Orono*	Φ H K House
Morse, Warren, B. A., Eh. University of Maine, 1907	*Brewer*	Brewer
Pol, Frances May, B. A., Eh. Smith College, 1906	*Bangor*	Bangor
Reed, Lowell Jacob, B. S., Ee. University of Maine, 1907.	*Orono*	College St.
Robbins, Linville Wadsworth, A. B., A. M., Ed. Colby College, 1894 and 1897	*Brewer*	Brewer

Sweet, Henry Lewis, B. A., Ms. Amherst College, 1907	*Orono*	Main St.
Taylor, Thomas Francis, B. A., A. M., Lt. University of Maine, 1904 Dartmouth College, 1905	*Bangor*	Main St.
Washburn, Willis Flye, B. S., Ch. University of Maine, 1907	*Orono*	Pine St.
Wilbur, Walter Edmund, B. S., Ms. University of Maine, 1908.	*Pembroke*	Pine St.

SENIORS

Bennet, DaCosta FitzMaurice, Ec.	*Lubec*	Θ E House
Black, William Milgate, Ce	*Belfast*	Φ H K House
Blair, Arthur Adolphus, B. D., Tufts College, 1895, Pl.	*Caribou*	Caribou
Bowman, Harold Melville, Me.	*Salmon Falls, N. H.*	Φ H K House
Brann, Bertrand French, Ch.	*Bangor*	Bangor
Carlisle, George Thomas, Jr., Fy.	*North Edgecomb*	18 Main St.
Carter, Warren Alfred, Ch.	*Nobleboro*	Φ K Σ House
Chandler, Bernard Albert, Fy.	*New Gloucester*	Φ K Σ House
Chase, Florence Polleys, Rm.	*Baring*	Mt. Vernon House
Chase, Mary Ella, Hy.	*Bluehill*	Mt. Vernon House
Clemons, Samuel Wadsworth, Me.	*Hiram*	Α Τ Ω House
Cleveland, Charles Calvin, Ag.	*Skowhegan, R. F. D. 4*	18 Main St.
Conner, Warren Edward, Ce.	*Auburn*	Φ K Σ House
Corson, Preston Llewellyn, Ee.	*Wilton*	301 Oak Hall
Cram, Frederick Sutherland, Ce.	*Brunswick*	Σ Α Ε House
Davis, Cyrus Hersey, Ee.	*Woodfords*	Park St.
Deering, George Percy, Ee.	*Winslow's Mills*	Θ E House
Eddy, Harold Frederick, Ee.	*Bangor*	Bangor
Emerson, Walter Lee, Ce.	*Lewiston*	Β Θ Π House
Estey, Chester Arthur, Ee.	*Lisbon Falls*	35 Mill St.
Farrar, Cecil C., Lt.	*Guilford*	Old Town
Farwell, Howard Lovering, Me.	*Dorchester, Mass.*	Φ Γ Δ House
Fenn, Charles Henry, Ce.	*Portland*	Σ X House
Finnigan, Edward Joseph, Ce.	*Bangor*	Δ Τ Δ House
Fogler, William Andrew, Ee.	*West Rockport*	Σ X House
Foote, Frederick William, Pl.	*Milbridge*	Bennock St.
French, Guy Clifton, Ce.	*Skowhegan*	Φ H K House
Gardner, Edward Earle, Pm.	*East Machias*	Σ Α Ε House
Gerrity, Joe Warren, Ec.	*Bangor*	K Σ House

Gilbert, William Henry, Ec.
Haines, Willis Nathan, Rm.
Haggett, Harold Daniel, Ce.
Hall, Earle Wilmer, Ee.
Ham, Philip Winthrop, Ce.
Harmon, Ralph Chase, Ee.
Harvey, Walter Ora, Me.
Harvey, Willis Lake, Ee.
Henry, Ralph Morton, Ee.
Higgins, Harrison Parker, Me.
Holton, Carl Russell, Ce.
Hutchinson, Arthur Nash, Ch.
Jackson, Ralph Lysander, Ce.
Jewett, John Nelson, Fy.
Johnson, Howard Rich, Ee.
Keating, Edmund Bernard, Ce.
Kimball, Winfield Alfred, Fy.
Knight, Frederick Daniel, Ee.
Knight, Mattie Grover, Bl.
Littlefield, Joseph Philip, Ee.
Lynch, John Philip, Pm.
McArthur, Chase, Gm.
McElroy, Joseph Walter, Me.
MacLean, Daniel Wallace, Ee.
Mason, Jesse Ham, Ch.
Mayo, Norman Haskell, Ce.
Merriman, Merle Eli, Me.
Miller, Harold Redmere, Ee.
Mooney, Percy Patrick, Ee.
Moore, Irving Hartwell, Ee.
Morrell, Harry Edwin, Ce.
Morrill, Raleigh Dudley, Me.
Morrison, Robley Howe, Ch.
Morton, Edward Watts, Ag.
Nash, Henry Leighton, Ee.
Nauman, George Valentine Ec.
Neal, Arthur Francisco, Ce.
Osgood, William Thompson, Fy.
Paine, Charles Brooks, Ce.
Palladino, Frederico, Ph. B., Pl.
Taylor University, 1897

South Glastonbury, Ct. Σ A E House
Dexter Β Θ Π House
Bath Δ T Δ House
Farmington A T Ω House
Livermore Falls Φ K Σ House
Woodfords Σ X House
Kenduskeag Θ E House
Orono Main St.
Cumberland Mills 301 Oak Hall
Somerville, Mass. Σ A E House
Boothbay Harbor Δ T Δ House
Cherryfield Σ X House
Jefferson Σ A E House
Cherryfield Σ X House
South Portland 302 Oak Hall
Salem, Mass. Θ X House
Norway Φ K Σ House
Limerick Φ K Σ House
Deer Isle Mt. Vernon House
Ogunquit A T Ω House
South Berwick A T Ω House
Milltown Park St.
Manchester, N. H. 112 Oak Hall
Eastport College St.
Beverly, Mass. Σ X House
Bluehill Σ X House
Portland Φ K Σ House
South Berwick Φ H K House
Bangor Bangor
Readfield Β Θ Π House
Lewiston Φ H K House
Orono Wingate Hall
Norway Σ A E House
Kennebunk Σ A E House
Cherryfield Σ A E House
Portland Δ T Δ House
North Berwick Β Θ Π House
Garland 112 Oak Hall
Eastport A T Ω House
Bangor Bangor

Parker, Horace Albion, Ce.	*Livermore Falls*	Φ H K House
Patterson, Alfred Bassett, Me.	*Winslow*	302 Oak Hall
Perry, Donald Cushman, Ee.	*Island Falls*	Θ X House
Pettigrew, Herbert Tracy, Ce.	*East Machias*	Δ T Δ House
Philbrook, Howard Grenville, Ee.	*Shelburne, N. H.*	B Θ Π House
Pike, Lewis Freeman, Fy.	*Milton, N. H.*	K Σ House
Plumly, Clinton Alley, Ce.	*Lincoln*	Φ K Σ House
Pray, Elmer Onsville, Ce.	*Kittery*	Δ T Ω House
Randall, James William, Ce.	*Freeport*	Δ T Δ House
Rich, Harold Arthur, Me.	*Bangor*	B Θ Π House
Richardson, Frank Cummings, Ce.	*Jefferson*	Σ Δ E House
Richardson, Irene Clara, Rm.	*Old Town*	Old Town
Roberts, Benjamin Lewis, Fy.	*Bangor*	Θ E House
Robinson, Reginald Elton, Me.	*Oxford*	Δ T Δ House
Rogers, Frederick Drummond, Me.	*Richmond*	Σ X House
Rollins, Kenneth Albert, Ec.	*Farmington*	Φ Γ Δ House
Shatney, Thomas Franklin, Fy.	*Orono*	28 Pine St.
Shaw, Christine Myrtle, Lt.	*Orono*	College St.
Shaw, Cora May, Ms.	*Orono*	College St.
Smith, Dexter Southworth Johnson, Ec.	*Bangor*	Σ Δ E House
Smith, George Lewis, Me.	*Long Cove*	Σ X House
Smith, Herman Brackett, Me.	*Saco*	Φ K E House
Smith, Harry Woodbury, Ag.	*Sangerville*	Θ X House
Smith, Wilbur Olin, Ee.	*Peabody, Mass.*	Myrtle St.
Southwick, Everett Frost, Ag.	*Peabody, Mass.*	Myrtle St.
Sutton, Harry Edward, Hy.	*Orono*	Bennoch St.
Thomas, Deane Stanley, Ec.	*Yarmouthville*	Θ E House
Torrey, Guy Ellicott, Ce.	*Deer Isle*	K Σ House
Towle, Elton La Forrest, Me.	*Portland*	Φ Γ Δ House
Tripp, James Woodbury, Pl.	*Orrington*	Φ H K House
Wescott, Thurman Cary, Ce.	*Patten*	K Σ House
White, Harry Alfred, Ce.	*Lynn, Mass.*	K Σ House
Williams, Guy Herbert, Ce.	*Manchester, N. H.*	Θ X House
Woodbury, Dwight, Ms.	*Beverley, Mass.*	Σ X House

JUNIORS

Ames, Leroy Winfield, Bl.	*Bangor*	Bangor
Andrews, Wales Henry, Eh.	*Middleboro, Mass.*	B Θ Π House
Arnold, Frances Elizabeth Stanislaus, Rm.	*Orono*	North Main St.

Bagg, William Clarke, Fy.	*Utica, N. Y.*	Β Θ Π House
Barker, Harold Louis, Ce.	*Boston, Mass.*	Σ X House
Barron, Frank, Ee.	*Orono*	Forest St.
Battles, James Edmund, Ee.	*Frankfort*	Myrtle St.
Baylies, Wallace Brownell, Ce.	*New Bedford, Mass.*	Φ Η Κ House
Berry, Earle Sylvester, Ee.	*Malden, Mass.*	Σ X House
Bigney, Frederick Rowe, Ee.	*Greenville*	Δ Τ Δ House
Bird, Roy James, Ch.	*South Paris*	Main St.
Bradford, Frederick Charles, S. B., Harvard University, 1908, Ag.	*Manchester, N. H.*	Mill St.
Bragg, Lester Morse, Ce.	*Stockton Springs*	Φ Γ Δ House
Burch, Joseph Francis, Ce.	*Biddeford Pool*	Main St.
Burke, Alfred Kimball, Ch.	*Kennebunk*	Σ Α Ε House
Callahan, Edgar Frederick, Ed.	*Orono*	57 Mill St.
Carle, Harry Pennell, Ce.	*Portland*	Φ Γ Δ House
Chadbourne, Vaughn Russell, Ee.	*Mattawamkeag*	Park St.
Chandler, Alfred Blanchard, Ee.	*Yarmouthville*	Mill St.
Chase, Walter Melville, Pm.	*Bangor*	Bangor
Clifford, Harold Linscott, Ce.	*Orono*	Α Τ Ω House
Cole, Raymond Thurber, Me.	*South Portland*	Φ Η Κ House
Collins, John Lambert, Ee.	*Gardiner*	Main St.
Congdon, William Everett, Ee.	*Portland*	54 North Main St.
Conlogue, Frederick Willis, Ee.	*Houlton*	111 Oak Hall
Cook, Horace Jewett, Ce.	*Waterville*	Α Τ Ω House
Corning, Grover Trites, Ee.	*Lynn, Mass.*	Φ Κ Σ House
Cragin, Philbur Leroy, Ee.	*Woodfords*	Θ X House
Crocker, Ralph Willis, Ee.	*Bangor*	Bangor
Cruickshank, Robert Bacon, Fy.	*Akron, Ohio*	Β Θ Π House
Cummings, Chester Goodman, Me.	*Vanceboro*	Δ Τ Δ House
Danforth, Hugh Nagles, Me.	*Denison, Texas*	Α Τ Ω House
Davis, Fred Dumont, Fy.	*Brooks*	Myrtle St.
Dyer, Howard Kenneth, Ee.	*Calais*	Σ X House
Dyer, John Raymond, Ce.	*Truro, Mass.*	104 Oak Hall
Eaton, James Murchie, Ee.	*Princeton*	Φ Γ Δ House
Estabrooke, Carl Bertrand, Eh.	*Orono*	Main St.
Farnham, Harry Lester, Ee.	*Lynn, Mass.*	Θ Ε House
Fassett, Malcolm Edward, Ce.	*Woodfords*	Φ Γ Δ House
Fortier, Frank Eugene, Ag.	*Turner Center*	Δ Τ Δ House
Fox, Kent Richard, Ch.	*Bangor*	Β Θ Π House
Gardner, Albert Kinsman, Ag.	*Rockland*	Β Θ Π House
Gardner, Leroy Whittier, Fy.	*Dennysville*	Θ X House

Gifford, George Endicott, Eh.	*Salem, Mass.*	Σ A E House
Goodrich, George Percy, Ee.	*Phippsburg*	Mill St.
Goodrich, Merton Taylor, Ms.	*Bingham*	32 North Main St.
Graham, Charles Liguori, Ms.	*Brooklyn, N. Y.*	Θ X House
Greenwood, Ralph Harrison, Ee.	*Presque Isle*	Φ H K House
Hall, Clifton Allison, Ee.	*Brewer*	Φ K Σ House
Hardy, Simeon Joseph, Me.	*East Hampden*	Δ T Δ House
Harmon, W. Warren, Ec.	*Old Orchard*	Δ T Δ House
Hatch, Roy Otis, Ch.	*Orono*	Θ X House
Hicks, Weston Milliken, Ce.	*Portland, R. F. D. No. 4*	Mill St.
Hobbs, Ralph Everett, Ee.	*Lynn, Mass.*	Θ E House
Howard, George Crosby, Eh.	*Orono*	Oak St.
Huntington, Frances Willard, Hy.	*Lynn, Mass.*	Mt. Vernon House
Jellison, Rupert A., Ch.	*Bar Harbor*	Δ T Δ House
Johnson, Chester Cleveland, Ms.	*Portland*	Σ A E House
Jones, Roy Chandler, Ee.	*Gardiner*	Crosby St.
Jordan, Edith Luella, Rm.	*Old Town*	Old Town
Jordan, George King, Me.	*Westbrook*	Θ X House
Jordan, Harvey Herbert, Ce.	*Waltham*	203 Oak Hall
Keen, Lewis Albert, Ee.	*South Paris*	Φ H K House
Ketchum, Charles Clayton, Ce.	*Ashland*	111 Oak Hall
Kyes, Herman Winslow, Ee.	*Ipswich, Mass.*	Φ H K House
LaMarche, George Everett, Ps.	*Bay City, Mich.*	Main St.
Lamb, Ernest, Ec.	*Utica, N. Y.*	B Θ Π House
Leary, Arthur Joseph, Ce.	*Somersworth, N. H.*	Θ X House
Libby, Albert Edwin, Ce.	*Portland*	K Σ House
Littlefield, Philip Henry, Me.	*Portland*	Park St.
Littlefield, Roby Perkins, Ch.	*Ogunquit*	A T Ω House
Maddox, Austin Louis, Ce.	*Ellsworth*	203 Oak Hall
Mayo, Clarence Arthur, Ee.	*Hampden Corner*	B Θ Π House
Merriam, Frank Edmund, Me.	*Skowhegan*	Main St.
Merrill, Dimon Emery, Ee.	*Alfred*	201 Oak Hall
Merrill, Walter Scott, Ce.	*Skowhegan*	109 Oak Hall
Moore, Arthur Scudder Ee.	*West Lynn, Mass.*	Φ K Σ House
Norton, Raymond Pratt, Ch.	*Patten*	Δ T Δ House
Oak, Allen Edson, Ce.	*Caribou*	B Θ Π House
Pettey, Franklin Williams, Bl.	*Fall River, Mass.*	Δ T Δ House
Philbrook, John Neal, Ce.	*Woodfords*	54 North Main St.
Pickup, Herbert Wilfred, Ce.	*Ipswich, Mass.*	Θ X House
Porter, Charles Augustus Cushman, Ce.	*Bangor*	Φ K Σ House

Pratt, Charles Oland, Ce.	*West Medford, Mass.*	Θ E House
Ray, Vinton Royal, Ce.	*Auburn*	Θ E House
Redman, Ralph Woodbury, Ag.	*Corinna*	Φ H K House
Reed, Geneva Alice, Ms.	*Orono*	College Road
Reed, Marshall Everett, Fy.	*Roxbury*	Θ X House
Rich, Harry Herbert, Ee.	*Bangor*	K Σ House
Rose, Joseph George, Ce.	*Brooklyn, N. Y.*	Θ X House
Royal, Harold Merton, Ee.	*Hermon*	Main St.
Russell, Edward Giddings, Ce.	*Eastport*	Σ A E House
Sawyer, Frank Sleeper, Ce.	*Sabattus*	Θ X House
Sawyer, Nathan Howard, Ag.	*Cape Elizabeth*	Θ X House
Schierloh, August Herman Theodore, Gm.	*Brooklyn, N. Y.*	Σ A E House
Sevrens, Oliver Fisk, Bl.	*West Medway, Mass.*	Δ T Δ House
Simonton, Philip Downing, Me.	*Yarmouthville*	Mill St.
Skolfield, Herbert Nason, Ce.	*North Harpswell*	Φ K Σ House
Smith, Charles French, Ee.	*Skowhegan*	Φ Γ Δ House
Snow, Edward Notley, Ee.	*Skowhegan*	Φ H K House
Springer, George Edwin, Ee.	*Portland*	Θ E House
Stickney, Charles Edwin, Me.	*Portland*	Φ Γ Δ House
Stover, Isaac Maxwell, Ee.	*Orono*	Campus
Stuart, George Albert, Ag.	*Calais*	A T Ω House
Sweetser, Herman Pittee, Ag.	*Cumberland Center*	Σ X House
Tracy, Clarence Curtis, Ce.	*Bridgeport, Conn.*	K Σ House
Travis, James Irving, Ec.	*Machiasport*	Σ A E House
Tucker, Charles Henry, Ce.	*Orono*	30 Main St.
Wadsworth, Francis George, Ed.	*Sanford*	A T Ω House
Wadsworth, George Sabine, Ag.	*Eastport*	A T Ω House
Walker, Harold Edward, Ce.	*Sabattus*	Θ X House
Wallace, George Alexander, Ce.	*Portland*	B Θ Π House
Webster, George Albert, Ee.	*Farmington*	201 Oak Hall
Wentworth, George Jacob, Ag.	*Kennebunk*	Φ H K House
Wentworth, William Hiram, Fy.	*Somersworth, N. H.*	Σ X House
Wiley, Fred Everett, Ee.	*Hartford, Conn.*	Θ X House
Winters, Amos Arthur, Ce.	*Waterville*	K Σ House
Woods, Harry Morgan, Ms.	*Orono*	Main St.
Workman, Thurlow Tracy, Ec.	*Brewer*	Δ T Δ House
Wright, Harold Williams, Ce.	*Reading, Mass.*	Σ X House

SOPHOMORES

Adams, Alfred Sanford, Ms.	*Newport*	College St.
Atwood, Albert Samuel, Ee.	*Phillips*	Φ H K House
Attwood, Stanley Bearce, Ch. Eng.	*Auburn*	Park St.
Bailey, Howard Earle, Ce.	*Westbrook*	Θ X House
Barker, Jack Sears, Me.	*Calais*	Δ T Δ House
Bartow, William Edgar, Ch. Eng.	*Utica, N. Y.*	North Main St.
Bearce, George Dunham, Fy.	*Auburn*	B Θ Π House
Benjamin, Charles Smith, Ch.	*Old Town*	Old Town
Blaisdell, Allen Holt, Me.	*Bangor*	57 Fifth St.
Blaisdell, Guy Marble, Ee.	*Farmington*	3 Peters St.
Blanchard, Alfred Michel, Ce.	*Southbridge, Mass.*	Θ X House
Blanchard, Ralph Childes, Ce.	*Cumberland Center*	309 Oak Hall
Brown, Daniel Grover, Ce.	*South Paris*	305 Oak Hall
Brown, Florence Evelyn, Hy.	*Old Town*	Old Town
Brown, Jennie Christianna, Eh.	*Orono*	Park St.
Buck, Raymond Wilbur, Ce.	*Monticello*	Σ X House
Burden, Harry Poole, Ce.	*Lynn, Mass.*	Θ X House
Burgess, Harold Brainerd, Ce.	*Rockland*	Δ T Δ House
Burke, John Joseph, Ee.	*Chelsea, Mass.*	307 Oak Hall
Buzzell, Ralph Waldo, Ce.	*Rockport*	Φ H K House
Carlisle, Ralph Harrison, Ee.	*Patten*	College St.
Carr, John Oliver, Ch. Eng.	*Bangor*	Bangor
Casey, Edmund Patrick, Me.	*Milltown, N. B.*	Θ X House
Chapman, George Bunker, Me.	*Holyoke, Mass.*	1 Main St.
Chenery, Frederick Lincoln, Jr., Ee.	*Wayne*	110 Oak Hall
Clark, Lowell Freeman, Me.	*Hampden*	205 Oak Hall
Cobb, Frank Collins, Ee.	*South Gardiner*	Σ A E House
Conley, Albert Davis, Ch.	*Woodfords*	54 North Main St.
Coombs, David Clifford, Ee.	*Auburn*	K Σ House
Cooper, Parker Messer, Ce.	*Jefferson*	110 Oak Hall
Corbett, Matthew, Jr. Pm.	*South Norwalk, Conn.*	Main St.
Cummings, Nathan Clifford, Ee.	*Gorham*	Φ Γ Δ House
Cushman, William Parsons, Ce.	*West Pownal*	207 Oak Hall
Davis, Frederick Gordon, Me.	*Norridgewock*	4 Forest St.
Davis, Raymond Webber, Ec.	*Guilford*	Φ Γ Δ House
Davis, Walter Francis, Ee.	*Old Town*	Old Town
Day, Letitia Elizabeth, Lt.	*Arlington, N. J.*	Mt. Vernon House
Day, Ralph Roscoe, Ee.	*Cornish*	Φ K Σ House
Dinsmore, James Leigh, Fy.	*Hallowell*	Φ H K House
Dixon, Thomas Libby, Ee.	*Lewiston*	305 Oak Hall

Dodge, Roland Lester, Ag.	*North Islesboro*	202 Oak Hall
Doore, Clarence Freeland, Me.	*Dover*	Δ T Δ House
Drew, Laurence Evans, Ce.	*Brunswick*	Σ A E House
Duran, David Ray, Ce.	*Westbrook*	Δ T Δ House
Dwinal, Olaf Windsor, Ce.	*Auburn*	Θ X House
Eastman, Henry Harlan, Ce.	*Limerick*	A T Ω House
Eaton, Arthur Clement, Ch. Eng.	*Wenham, Mass.*	Σ X House
Everett, Jasper Willard, Ee.	*Norway*	Θ X House
Farwell, Frank Foster, Jr., Me.	*Dorchester, Mass.*	Φ Γ Δ House
Fenn, Herbert Keeney, Ce.	*Portland*	Σ X House
Fish, Fred Enoch, Ce.	*Farmington*	109 Oak Hall
Fitch, LeRoy Allan, Ce.	*East Sebago*	304 Oak Hall
Flanagan, John Patrick, Ch.	*Bangor*	Bangor
Folley, Delton Wharff, Ee.	*Sangerville*	Main St.
Geery, Henry Clinton, Ce.	*Katahdin Iron Works*	Φ H K House
Geery, Louis Duncan Tallman, Ch.	*Katahdin Iron Works*	312 Oak Hall
Gerrish, Charles Samuel, Ce.	*Kittery Point*	Peters St.
Gerrish, Leo Melville, Ee.	*Berlin, N. H.*	Σ A E House
Gifford, George Washington, Ee.	*Dennysville*	40 North Main St.
Gilbert, Annie Hoadley, Lt.	*Old Orchard*	Mt. Vernon House
Gooch, Carl Joseph, Ce.	*Biddeford*	Φ H K House
Gooch, Winslow Lamond, Fy.	*Alfred*	Σ X House
Goodnow, Alden Church, Ee.	*Fairhaven, Mass.*	B Θ Π House
Goodwin, Alexander Willard, Ee.	*Vanceboro*	Δ T Δ House
Gould, William Sanford, Jr., Ee.	*Dexter*	College St.
Hadlock, Harry William, Ee.	*Yarmouth*	30 Main St.
Hall, Louise Frances, Eh.	*Belfast*	Mill St.
Hall, William Scribner, Ch.	*Norwich, Conn.*	Commons
Hammond, Avery Carleton, Me.	*Orono*	Main St.
Harris, Hiram Elmer, Ee.	*West Minot*	32 North Main St.
Hart, Ashton Halsted, Ce.	*Presque Isle*	K Σ House
Haskell, William Oleson, Ch. Eng.	*Westbrook*	Φ Γ Δ House
Haslem, Howard Giles, Ce.	*Bangor*	Bangor
Hatch, Harrison Morton, Ce.	*West Groton, Mass.*	Θ X House
Hatch, Warren William, Me.	*Brooklyn, N. Y.*	North Main St.
Hayes, Leo Francis, Ce.	*Southbridge, Mass.*	Θ X House
Hebard, William Everett, Me.	*Fishdale, Mass.*	212 Oak Hall
Hill, Walters George, Ce.	*Bar Harbor*	Θ E House
Holmes, Oliver Wendell, Ee.	*Eastport*	205 Oak Hall
Hooper, Irvin Frothingham, Ce.	*West Lynn, Mass.*	Θ H K House
Hosmer, George Lawrence, Me.	*Rockland*	A T Ω House
Houghton, Thomas Edward, Ag.	*Fort Fairfield*	Θ E House

Howe, George Henry, Jr., Ce.	*Caribou*	Σ X House
Howes, Harry Winslow, Ee.	*Middleboro, Mass.*	Δ T Δ House
Ingham, Harold William, Ce.	*Haverhill, Mass.*	A T Ω House
Johnson, Walter Hauteville, Ce.	*Oakland*	Θ X House
Jones, Sidney Morrison, Ce.	*Bangor*	B Θ Π House
Kavanah, Gladys Emma, Ms.	*Bangor*	Bangor
Kilburn, Percy Gordon, Ce.	*Fort Fairfield*	Beach St.
King, James Putnam, Ee.	*Peabody, Mass.*	Θ E House
Kingsbury, Forest Pearl, Ce.	*Brewer*	Brewer
Kingsley, Ernest Roy, Ee.	*Yarmouthville*	Mill St.
Kooreman, Lennox M., Fy.	*Meriden, Conn.*	
Leavitt, George Clark, Bl.	*Norway*	202 Oak Hall
LeBaron, LeRoy Morse, Ee.	*West Wareham, Mass.*	204 Oak Hall
Lee, Horace Newton, Fy.	*Greenwood, Mass.*	College St.
Leonard, Paul Cyprian, Ee.	*Frankfort*	Pine St.
Lord, George Lester, Ce.	*South Berwick*	308 Oak Hall
Lycette, Cecil Leland, Ce.	*Houlton*	211 Oak Hall
McCarthy, Maurice Franklin, Ch.	*Lewiston*	K Σ House
McHale, Martin Joseph, Ce.	*Stoneham, Mass.*	Θ E House
Markle, Bert Christian, Ce.	*Northampton, Mass.*	Σ A E House
Marshall, Robert Clarence, Fy.	*Wellesley, Mass.*	Θ X House
Maxcy, Everett Haseltine, Ec.	*Gardiner*	Crosby St.
Maxwell, Edwin Clayton, Ce.	*Palmer, Mass.*	Mill St.
Merrell, James Raymond, Ce.	*North Adams, Mass.*	Δ T Δ House
Morrison, Freeland John, Ch.	*Norway*	Σ A E House
Murphy, Cyrus William, Jr., Ee.	*West Kennebunk*	Park St.
Nason, Fred Warner, Ch. Eng.	*Haverhill, Mass.*	A T Ω House
Noyes, Robert Jackman, Ce.	*Georgetown, Mass.*	A T Ω House
Oak, Donald Prescott, Ce.	*Bangor*	A T Ω House
Osborne, Atlee Burpee, Ce.	*Fort Fairfield*	Θ E House
Parsons, Wallace Emery, Ce.	*North Anson*	B Θ Π House
Patch, Clifford, Ch. Eng.	*Bangor*	Bangor
Patterson, Ralph Edwin, Ce.	*Bangor*	A T Ω House
Peaslee, Dana Newton, Ce.	*Lynn, Mass.*	Main St.
Peckham, Wentworth, Fy.	*Lewiston*	B Θ Π House
Perkins, Lewis West, Ce.	*Ogunquit*	Φ H K House
Phillips, George Alfred, Ce.	*Westbrook*	A T Ω House
Pinkham, Charles Joseph, Me.	*Farmington*	211 Oak Hall
Pinkham, Niles Cassius, Fy.	*Portland*	Φ Γ Δ House
Pond, Ralph Benjamin, Ee.	*Bangor*	Φ Γ Δ House
Prentiss, Mildred Louise, Gm.	*Brewer*	Mt. Vernon House

Quinneen, Charles Roger, Ee.	*Charlestown, Mass.*	Mill St.
Rea, Charles Drummond, Ce.	*Southwest Harbor*	Park St.
Richardson, Arthur Berry, Ce.	*Rockland*	Β Θ Π House
Reed, Philip Page, Ec.	*Orono*	College St.
Robinson, John Tyler, Ee.	*Sherman Station*	Middle St.
Rogers, Luther, Jr., Ee.	*Patten*	Κ Σ House
Russell, Harl, Ce.	*Dexter*	103 Oak Hall
Ryan, Philip Eary, Eh.	*Milltown*	Σ Α Ε House
Sargent, Harold Rodolph, Ce.	*Melrose, Mass.*	Θ Ε House
Sawtelle, Philip Perry, Me.	*Augusta*	1 Main St.
Scales, Nelson Ned, Ec.	*Guilford*	Φ Γ Δ House
Scott, Arthur Leon, Ee.	*Portland*	Κ Σ House
Shaw, Louis Ethelbert, Ce.	*Orono*	Mill St.
Shorey, Ralph Oscar, Ce.	*Foxcroft*	Stillwater
Sisson, Elmer Allen, Ee.	*So. Middleboro, Mass.*	204 Oak Hall
Smith, Nelson Ernest, Ee.	*Peabody, Mass.*	Θ Ε House
Smith, Russell, Ag.	*Auburn*	Κ Σ House
Southard, Frank Elwyn, Ec.	*Lewiston*	Κ Σ House
Strout, Philip Stanwood, Ee.	*So. Portland*	Θ Ε House
Sumner, Merton Rogers, Ce.	*South Paris*	Φ Κ Σ House
Taylor, Florence Anna, Rm.	*Hermon*	Mill St.
Tibbetts, Raymond Winslow, Ch.	*Camden*	207 Oak Hall
Thompson, Lynwood Burkett, Fy.	*Belfast*	101 Oak Hall
Tobey, Elmer Robert, Pm.	*Norridgewock*	4 Forest St.
Towne, Harland Eugene, Ce.	*East Dover*	Stillwater
Varney, George Newton, Me.	*East Rochester, N. H.*	Grove St.
Verrill, Albert, Ch. Eng.	*Westbrook*	304 Oak Hall
Vickery, Harry Whitman, Ee.	*East Auburn*	Φ Η Κ House
Waite, Sumner, Fy.	*Portland*	Φ Γ Δ House
Wakefield, George Arthur, Bl.	*Andover*	Φ Κ Σ House
Wakefield, Oscar Abel, Ce.	*Andover*	Φ Κ Σ House
Walker, Ernest Thaxter, Me.	*Biddeford*	Φ Κ Σ House
Warren, Benjamin Otis, Hy.	*Fryeburg*	Β Θ Π House
Weeks, Allen Henry, Me.	*Jefferson*	North Main St.
Wertheim, Leslie Jack, Ce.	*Berlin, N. H.*	Β Θ Π House
Wetherell, John Gamble, Ce.	*Portland*	Park St.
Whitney, Benjamin Burbank, Ce.	*Strong*	Park St.
Whittier, Earle Ovando, Ch. Eng.	*Farmington*	Θ Ε House
Williams, Boardman Stevens, Ch.	*Fort Fairfield*	Φ Γ Δ House
Wilson, Harrison Morton, Ee.	*Cherryfield*	Σ Χ House
Wilson, Winthrop Field, Ce.	*Portland*	Σ Χ House
Wood, Harold Grinnell, Fy.	*Hallowell*	Σ Α Ε House

FRESHMEN

Adams, Archie Asbury	*La Grange*	Main St.
Aldridge, James Stewart	*Little Falls, N. Y.*	Β Θ Π House
Allen, Blynne	*Norway*	Park St.
Arbuckle, Thomas Loraine	*Skowhegan*	Σ Α Ε House
Ash, John Emmons	*Bar Harbor*	College St.
Ayers, Elmore, Me.	*Dorchester, Mass.*	Α Τ Ω House
Ballou, William Rice	*Bath*	Φ Γ Δ House
Bartlett, Emily Mary	*Orono*	College St.
Batty, Charles Albert	*Worcester, Mass.*	Δ Τ Δ House
* Benson, Arthur Wilhelm	*Wellesley, Mass.*	Δ Τ Δ House
Berry, Stewart Francis	*Malden, Mass.*	Park St.
Bickford, Miretta Lydia	*Skowhegan*	Mt. Vernon House
Blackwell, Charles Hudson	*Portland*	Φ Κ Σ House
Boon, Grace Helen	*Junction City, Kan.*	Stillwater
Brown, George Jarvis	*Presque Isle*	College St.
Brundin, Ernest Walfred	*Corona, N. Y.*	Commons
Buzzell, Robert Loring	*Old Town*	Old Town
Carleton, Edward Frazier	*Georgetown, Mass.*	College St.
Carr, Ernest Hilton	*Portland*	Park St.
Cassey, Thomas Ephraim	*Lynn, Mass.*	Θ Ε House
Catheron, Lewis Johnson	*Needham, Mass.*	Φ Γ Δ House
Cavanaugh, Charles Alton	*Portland*	Campus
Center, Irving Emory	*Kingston, Mass.*	Park St.
* Chapman, Henry Wey	*Harrison*	54 N. Main St.
Chase, Alden	*Bryant's Pond*	Θ Χ House
Clapp, Alma Eliza	*Brewer*	Brewer
* Clark, Frank William	*Sanford*	Peters St.
Clark, George Freeman	*Tremont*	Myrtle St.
Clark, Verrial John	*Guilford*	Θ Ε House
Cleaves, Carl Schurz	*Bar Harbor*	Φ Γ Δ House
Cleaves, Charles Brown	*Portland*	Park St.
Coffin, Celia May	*Bangor*	Bangor
Conners, Edward Warren	*Great Works*	Great Works
Coté, Orila Cyrille	*Haverhill, Mass.*	307 Oak Hall
Crabtree, Alfred Evans	*Hancock*	Κ Σ House
* Crosby, Harry Lawrence	*Portland*	Κ Σ House
Darrell, Franklin Lloyd	*Brooklyn, N. Y.*	Β Θ Π House
Deering, Arthur Lowell	*East Denmark*	54 North Main St.
Downing, Harry Frye	*Norway*	Forest St.

* In partial standing.

* Dudley, Frank Edward	*Old Town*	Old Town
Dunlap, Clarence	*Farmington*	206 Oak Hall
Dunn, James Whitman	*Cumberland Center*	Main St.
* Dwyer, William Henry	*Biddeford*	Park St.
Dyer, Samuel	*Attleboro, Mass.*	Commons
Emerson, Walter Bradbury	*Biddeford*	Park St.
Emerson, William Garland	*Great Works*	Great Works
Estabrooke, Marion Corthell	*Orono*	Main St.
Faulkner, Harold Clark	*Lynn, Mass.*	Θ E House
Fellows, Frank	*Bucksport*	Φ Γ Δ House
* Fernald, Brackett Britton	*Rochester, N. H.*	Park St.
Fernald, Ellie Mae	*Argyle*	Old Town
Fisher, Herbert Leir	*Ayers, R. F. D. 1*	Α Τ Ω House
Flint, Margaret	*Port Deposit, Md.*	Mt. Vernon House
Flint, Ralph James	*Port Deposit, Md.*	108 Oak Hall
Foster, David Albert	*Ellsworth Falls*	Myrtle St.
French, Roy Waldo	*Orange, Mass.*	Σ X House
Garland, Philip	*Old Town*	Old Town
George, Clifford Henry	*East Orrington*	Park St.
* Gibbs, John Orin	*Livermore Falls*	College St.
Gleason, Wallace Fred	*Mexico*	40 North Main St.
Gordon, Robert James	*Bangor*	Bangor
Gould, Maynard Sumner	*Camden*	Φ Η Κ House
Grant, Charles Harold	*Bangor, R. F. D. 3*	Brewer
Gray, Carl Harrison	*Lubec*	Σ Α Ε House
Gray, William Melvin	*Houlton*	Φ Κ Σ House
Guthrie, George Francis	*Bangor*	Bangor
Hanson, Walter King	*Bangor*	Φ Γ Δ House
Haskell, Benjamin	*Westbrook*	Φ Γ Δ House
Hayes, Arthur Gordon	*Oxford*	North Main St.
* Hinkley, Harry Wendell	*Rangeley*	Park St.
* Hodges, Ralph Corydon	*Richmond*	Crosby St.
Holbrook, George Thayer	*Vanceboro*	Park St.
Homer, Morton Leslie	*Bucksport*	Κ Σ House
Hopkinson, Ralph Stimson	*Saco*	Β Θ Π House
Horne, Harry Lennon	*Norway*	Main St.
Houghton, Lloyd Everett	*Lee*	54 North Main St.
Hussey, Philip Rodney	*Patten*	Φ Κ Σ House

* In partial standing.

Hussey, Robert Elliott	*Woodfords*	Grove St.
Jackson, James Foster	*Jefferson*	Σ Α Ε House
Jacobs, Lester Warner	*Rockland, Mass.*	College St.
Jewett, Donald Campbell	*Cherryfield*	Σ Χ House
Johnson, Isaac Carroll	*Woodfords*	Peters St.
Jones, Austin Whittier	*Bangor*	Κ Σ House
Jones, Lillian Curtis	*Bangor*	Bangor
Jones, Maurice Daniel	*Unity*	Grove St.
Joyce, Shirley Adelbert	*Bar Harbor*	Φ Γ Δ House
Kelley, Margaret June	*Bangor*	Mt. Vernon House
Kent, Benjamin Calvin	*Stillwater*	Θ Ε House
King, George Edward, Jr.	*Bethel*	Θ Χ House
Lancaster, Frank Hodgkins	*Presque Isle*	Φ Η Κ House
* Leonard, Charles William	*Dexter*	Θ Ε House
Lilly, Walter Harrison	*Woolwich*	40 North Main St.
Loring, Charles Sewall	*Jay*	Κ Σ House
Loring, Paul Cushing	*Yarmouthville*	Σ Χ House
Macdonald, Roger Winchester	*Peabody, Mass.*	Θ Χ House
McDonald, Warren	*Portland*	Φ Γ Δ House
McKeen, Ellis Wyman	*Fryeburg*	Β Θ Π House
McKenney, Lyman Atwell	*Saco*	Commons
Maines, Esca Allan	*Norway*	Mill St
Merrill, Ruth	*Auburn*	Bennoch St.
* Middlemas, George Arthur	*New Britain, Conn.*	Σ Α Ε House
Miller, William James Henry	*South Berwick*	Φ Η Κ House
Mills, William Joseph	*Hartford, Conn.*	Θ Χ House
Morrill, Clide Gilman	*Wakefield, Mass.*	Σ Χ House
Morse, William Robert	*Lynn, Mass.*	Δ Τ Δ House
Murray, Walter Edward	*Lynn, Mass.*	Myrtle St.
Newell, Charles William	*Houlton*	Φ Κ Σ House
Nickels, Albert Mortimer	*Cherryfield*	Park St.
Norberg, Herbert Conrad	*New Sweden*	Mill St.
Page, Austin Elmer	*Malden, Mass.*	Α Τ Ω House
Parker, George Leavitt	*Skowhegan*	107 Oak Hall
Parker, William Emery	*Harrington*	Κ Σ House
Parsons, John Thomas	*South Paris*	Middle St.
* Partridge, Edward Mortimer	*Newtonville, Mass.*	Δ Τ Δ House
Perkins, Walter Ezra	*Old Town*	Old Town
Pingree, George Deane	*Bethel*	Park St.

* In partial standing.

Pinkham, Seymour Leroy	*Portland*	Φ H K House
Quimby, Sherman Leslie	*Orrington*	Park St.
Rand, Lynne Thomas	*Unity*	Σ X House
Reid, Robert Clifford Henry	*Bangor*	Bangor
Richardson, Lester Lary	*Greenwood, Mass.*	College St.
Ridlon, Percy Fisher	*Old Orchard*	Main St.
Robinson, Chauncey Stephen	*Portland*	Φ H K House
Rogers, Walter Henry	*Cathance*	Crosby St.
Rowe, Charles Winfield	*South Paris*	311 Oak Hall
Russell, Luther Sampson	*Orono*	North Main St.
Russell, Mary Etta	*Orono*	North Main St.
Sanborn, Dana Charles	*Augusta*	Θ X House
Savary, Warren Hapgood	*East Wareham, Mass.*	Φ H K House
Sawtelle, William Hale	*Auburn*	Φ H K House
Sawyer, Edward Eugene	*Old Town*	Old Town
* Sawyer, Wellington Oliver	*West Jonesport*	Φ Γ Δ House
Schrumpf, William Ernest	*Farmington*	Park St.
Seabury, Rollins Angove	*Yarmouth*	Θ E House
Shales, Arthur	*Belfast*	Commons
Small, Ralph Hugo	*Oakland*	Θ X House
Smiley, Leon Walter	*Skowhegan*	Φ Γ Δ House
Smith, Montelle Chester	*Old Town*	Old Town
Southwick, William Alfred	*West Peabody, Mass.*	Stillwater
Spear, Graham Brown	*Springfield, Mass.*	Σ A E House
* Stark, Drew Dell	*New Britain, Conn.*	Σ A E House
Stevens, Ansel Herbert	*Norridgewock*	4 Forest St.
Stone, Lea George	*Limestone*	College St.
Sturtevant, Arthur Leroy	*Milo*	Park St.
Sullivan, Charles Eugene	*Gorham, N. H.*	Park St.
Sweetser, Harlan Hayes	*Cumberland Center*	208 Oak Hall
Talbot, Ralph Lee	*Lewiston*	Φ H K House
Tartre, Charles Wilfred	*Biddeford*	Oak Hall
Thompson, Harry Ernest	*Bath*	Σ A E House
Underhill, John Whitley	*Reading, Mass.*	Θ E House
Wallace, Willard Andrews	*Boston, Mass.*	College St.
Washburn, Dana Peabody	*Calais*	B Θ Π House
Webster, Ernest John	*Farmington*	Park St.
Whitcomb, Newell Bryant	*Bangor*	B Θ Π House
Winchester, Frank William	*Nahant, Mass.*	Myrtle St.
Winn, Harold Earl	*Dover, N. H.*	Mill St.

* In partial standing.

Witham, Walter Remick	*Madison*	Φ K Σ House
Wood, Charles Edgar	*Old Town*	Old Town
* Woodberry, George Roundy	*Beverly, Mass.*	Σ Λ E House
Woodman, Carrie Luella	*Claremont, N. H.*	Mill St.
Woodward, Karl Douglas	*Kingston, Mass.*	K Σ House
Worden, George Newton	*Vanceboro*	Park St.
Worster, Helen Charlotte	*Bangor*	Mt. Vernon House

SHORT PHARMACY

SECOND YEAR

Barker, Lester Alonzo	*Island Falls*	309 Oak Hall
Carlton, John Dana	*Rangeley*	309 Oak Hall
Jaffe, Harry	*Newport, R. I.*	310 Oak Hall
Kelleher, Adrian Fitzgerald	*Orono*	Mill St.
Le Brun, Arthur Albert	*Old Town*	Old Town
Miller, Orrin Linwood	*Carmel, R. F. D.*	Park St.
Mann, Roy Edward	*Van Buren*	Old Town
Sewall, Howard Newton	*York Village*	Mill St.
Ward, George Campbell	*Kennebunk*	Λ T Ω House

FIRST YEAR

Blossom, Waldo Ames	*Boothbay Harbor*	K Σ House
Davis, Frederic Libby	*South Berwick*	Λ T Ω House
Greeley, George Fred	*Bangor*	Bangor
Helgesen, Fred	*Newport, R. I.*	Beach St.
Johnson, Fred Clook	*Princeton*	Forest St.
Josselyn, Royce Brewster	*South Hanson, Mass.*	Park St.
McPheters, Alton Andrew	*Bangor, R. F. D. No. 7*	Bangor, R. F. D. No. 7
Moore, Lewis Raymond	*Bangor*	Δ T Δ House
Patterson, Arthur Willis	*Castine*	Σ Λ E House
Steele, Clayton Harvey	*West Jonesport*	Park St.

SPECIAL STUDENTS

Adams, Arthur Linwood, Ee.	*Brewer*	Brewer
Alton, Edwin Samuel, Ee.	*Lynn, Mass.*	Θ E House
Bowdoin, Emery Ray, Ms.	*Bucksport*	Main St.
Bruce, Herbert Putnam, Ce.	*Lynn, Mass.*	Θ E House

* In partial standing.

Codaire, Alfred Hotchkiss, Ce.	*Collinsville, Conn.*	Δ T Δ House
Coker, John James, Ce.	*Salem, Mass.*	105 Oak Hall
Cook, Albert Fremont, Ag.	*Bangor*	A T Ω House
Derby, Frank Holliday, Ce.	*Revere, Mass.*	Pine St.
Evans, Sidney Gurney, Ag.	*Waldo*	Campus
Faulkner, William Thomas, Ee.	*Orono*	Θ X House
Folsom, Edith Mae, Eh.	*Stillwater*	Stillwater
Gale, George Bryant, Ag.	*Petersham, Mass.*	Park St.
Godfrey, Harold Ernest, Ce.	*Sabattus, R. F. D. No. 2*	Δ T Δ House
Gould, Jay Herbert, Ce.	*Camden, R. F. D.*	Mill St.
Gould, Ralph Wadlin, Ee.	*Belfast*	Stillwater
Henderson, Robert Raymond, Ch.	*Madison*	110 Oak Hall
Holmes, Gay Eames, Ag.	*Belfast*	
Homans, Harry, Ce.	*North Vassalboro*	308 Oak Hall
Houghton, Arthur Clarke, Ch.	*Marlboro, Mass.*	A T Ω House
Hughes, Melvin Russell, Ce.	*Bath*	Forest St.
Jennings, George Henry, Fy.	*Cambridge, Mass.*	Σ X House
Leary, Herbert Daniel, Ce.	*East Boston, Mass.*	Θ X House
Leong, Yuen Foo, Ee.	*San Dung, Canton, China*	303 Oak Hall
Lewis, Enos Boise	*Springfield, Mass.*	Peters St.
Linn, Tsi Sheng, Ec.	*Hong Kong, China*	Peters St.
McEacharn, Daniel Grover, Ch.	*Old Town*	Old Town
McManus, Margaret Ellen, Eh.	*Bangor*	Mt. Vernon House
MacSkimmon, Anna Belle, Ed.	*Bangor*	Bangor
Mansfield, Kirkland Lathrop, Ce.	*Jonesport*	Middle St.
Mariner, Hazel Folsom, Rm.	*Milford*	Milford
Martin, George Alexander, Jr., Fy.	*Calais*	Θ K Σ House
Munoz, Eugenio Luis, Ce.	*Ponce, P. R.*	310 Oak Hall
Oliver, Arthur LeRoy, Ee.	*New Limerick*	College St.
Page, Edwin Richard, Ee.	*Winterport*	Park St.
Palladino, Mary Lucie, Eh.	*Bangor*	Bangor
Paul, Elliot Harold, Ce.	*Malden, Mass.*	North Main St.
Rackliffe, Colby Alden, Ag.	*Belfast*	Stillwater
Rich, Bernice Marie, Eh.	*Bradley*	Bradley
Richardson, Douglas Leffingwell, Ch.	*Tremont*	K Σ House
Scales, Eugene Mudgett, Me.	*Guilford*	Θ E House
Vaughan, Wiliam Jr., Ag.	*Belfast*	Campus

Walden, Harold George, Ag.	*Greenville*	Θ K Σ House
Weld, Edith Claire, Hy.	*Old Town*	Old Town
Wells, Nathan Holmes, Ag.	*Kennebunk*	Crosby St.
Wheeler, Stanley Mathews, Fy.	*South Paris*	Θ K Σ House
Whitmore, James Leon, Ee.	*North Haven*	311 Oak Hall
Winchester, Sidney Hodge, Fy.	*Corinna*	Φ H K House
Wing, Caroline Roberta, Rm.	*Bangor*	Bangor
Wyman, Perley Hammond, Me.	*Hampden*	Δ T Δ House

SCHOOL OF AGRICULTURE

SECOND YEAR

Bates, Irving Willard	*Biddeford*	Campus
Boston, Lawrence Baker	*Corinna*	105 Oak Hall
Dow, John Howard	*Castle Hill*	206 Oak Hall
Furman, James Julius	*Boston, Mass.*	Mill St.
Harris, Robert Burton	*Portland*	12 Beach St.
Leach, Ernest Cousins	*East Eddington*	2 Bennoch St.
Look, Harry Monroe	*Jonesboro*	Campus
Richardson, Willard Davis	*Bangor*	2 Bennoch St.
Spear, Tom Sawyer	*North Leeds*	Mill St.

FIRST YEAR

Blackington, Oscar Eaton	*Rockland*	Main St.
Burleigh, Ray Arthur	*Biddeford, R. F. D. No. 3*	Main St.
Ellis, Hal Nathan	*Rangeley*	Grove St.
Hall, Alfred Camden	*Swarthmore, Pa.*	College St.
Hartill, Leonard Ramsden	*Brunswick*	Myrtle St.
Payson, Raymond Murray	*Rockland*	Main St.
Pillsbury, Philip Otto	*Rangeley*	Grove St.
Sherwood, Neil Carpenter	*Cherryfield*	Park St.
Soule, Charles A.	*So. Freeport*	208 Oak Hall
Taylor, Curtis	*Springvale*	Peters St.
True, Warren Dudley	*Litchfield*	Myrtle St.
Whitney, Walter Skillings	*Cornish*	Park St.

SUMMER SESSION

(Abbreviations indicate subjects taken)

Adams, Arthur Linwood — *Brewer* — Ms.
Electrician

Bassett, Myrtis Ethel, B. A. — *Old Town* — Lt.
Colby College, 1907. Teacher of Latin, Hebron Academy.

Bearce, Ira Mellen, B. S. — *Hebron* — Ch. Ed.
University of Maine, 1904.

Benjamin, Charles Smith — *Old Town* — Ch. Ms. Rm.

Bigney, Edmund Scammon — *Greenville* — Ms. Rm.

Bouroncle, Lewis Humberts — *Arequipa, Peru, S. A.* — Ed.

Bowdoin, Isaiah Adelbert, B. A. — *Bucksport, R. F. D. No. 1* — Ch. Ed.
Colby College, 1906. Principal of Cornish High School.

Bowman, Harold Melville, — *Salmon Falls, N. H.* — Ec. Eh. Hy.

Brown, Jennie Christiania — *Orono* — Bl. Eh. Hy. Ms.

Buzzell, Robert Loring — *Old Town* — Bl. Rm.

Callahan, Edgar Frederic — *Orono* — Ed. Eh. Gm. Ms.

Campbell, Mary Elizabeth, A. B. — *Cherryfield* — Bl. Gm.
Smith College, 1907. Assistant in Attleboro, (Mass.), High. School.

Campbell, Morton Alfred, B. S. — *Townsend, Mass.* — Ed. Lt. Rm.
Boston University, 1900.

Catell, Alfred LeRoy — *Bangor* — Rm.

Cavanaugh, Alice Xavier — *Milford* — Bl.
Teacher in Grammar School

Chase, Mary Ella — *Bluehill* — Bl. Eh. Gm.

Cleveland, Charles Calvin — *Skowhegan* — Bl. Eh. Rm.

Coney, Eunice Rachael — *Bangor* — Bl. Ed.
Teacher.

Dixon, Esther Margaret — *Southwest Harbor* — Ed. Hy. Lt. Rm.
Teacher.

Drew, Lawrence Evans — *Brunswick* — Ms. Rm.

Ellis, Olive Irene — *Orono* — Ms. Rm.

Estabrooke, Carl Bertrand — *Orono* — Bl. Eh. Ec. Hy.

Estabrooke, Marion Corthell — *Orono* — Eh.

Faulkner, William Thomas — *Orono* — Eh. Ms.

Fernald, Ellie Mae — *Argyle* — Eh. Lt.
Teacher.

Gallagher, Joseph Francis — *Bangor* — Gm. Lt. Ms.

Gardner, Leroy Whittier — *Dennysville* — Bl. Ch. Rm.

Geery, Louis Duncan Tallman — *Katahdin Iron Works* — Ms. Ps. Rm.

Cerrish, Evan Stanley — *Bangor* — Eh.

Given, Jane Mary, A. B. — *Bowdoinham* — Bl. Eh. Rm.
Bates College, 1904. Assistant in Millinocket High School.

Goodrich, Merton Taylor — *Bingham* — Ed. Gm. Hy. Ps.

Goodwin, Carroll — *Skowhegan* — Ch. Rm.

Gould, Ralph Wadlin — *Belfast* — Hy. Ms. Ps.

Gower, Winnibel — *Skowhegan* — Ed. Eh. Lt.
Assistant in Madison High School.

Grady, Catherine Josephine — *Old Town* — Bl. Hy.
Teacher in Grammar School.

Graffam, Perley Edmund, A. B. — *Mechanic Falls* — Ed. Ch. Ps. Rm.
Bates College, 1899. Principal of High School.

Hardy, Simeon James — *East Hampden* — Ch. Ms. Rm.

Harvey, Florence Evelyn — *Orono* — Ms.

Hill, Herbert Staples, A. B. — *Yarmouth* — Ed. Ch. Ps.
Principal of High School.

Hodgdon, Daniel Russell — *Corinna* — Ed. Ch. Gm. Ps.
Principal Corinna Union Academy.

Hodgdon, Leona Fogg — *Corinna* — Eh. Hy. Rm.
Assistant in Corinna Union Academy.

Holton, Carl Russell — *Boothbay Harbor* — Ms. Rm.

Howard, George Crosby — *Orono* — Ec. Ed. Eh.
Pastor Methodist Episcopal Church.

Jackson, Ralph Lysander — *Jefferson* — Ms.

La Marche, Ernest Lane — *Caribou* — Lt. Ms.

La Marche, George Everett — *Orono* — Lt. Ms. Rm.

Leong, Yuen Foo — *Canton, China* — Ms.

Libby, Julia May — *Hartland* — Ed. Eh.

Linn, Tse Sheng — *Hong Kong, China* — Ed. Hy.

Linscott, Herman Joseph — *Damariscotta Mills* — Gm. Ms.

Loring, Charles Sewall — *Jay* — Ms.

MacSkimmon, Anna Belle — *Bangor* — Eh. Gm.
Teacher in Bangor Public Schools

Maddocks, Chester Arthur — *Ellsworth* — Ms.
Teacher in Bordentown (N. J.) Military Institute.

Mayo, Clarence Arthur — *Hampden Corner* — Eh. Ms. Ps.

Mehann, Marcia Winifred — *Alton* — Bl. Eh. Ms.

Merrill, Dimon Emery — *Alfred* — Hy. Ms. Ps.

Moots, Elmer Earl, B. C. E., M. S. — *Stillwater* — Gm. Rm.
Highland Park College, 1906. University of Maine, 1908. Instructor in Mathematics, University of Maine.

Morse, Mary Leland — *Orono* — Gm.

O'Neill, Edward Lynch — *Portland* — Ms. Rm.

Parker, Edward Alton, B. S. — *Skowhegan* — Ch. Ed. Ms.
University of Maine, 1904.

Parlin, Amber Lorene, A. B. — *Bradley* — Bl. Ps.
Bates College, 1904. Assistant in Gardiner (Mass.) High School.

Parkhurst, Arthur Daniel, Ph. B. — *Lisbon* — Ch. Ed. Ps.
Earlham College, 1896. Principal Winthrop High School.

Peabody, Ellen Holway — *Machias* — Gm. Pl.
Teacher.

Perkins, De Forest Henry, B. Ph., M. A. — *Skowhegan* — Ed.
University of Maine, 1900, 1905. Dist. Supt. Madison and Skowhegan.

Perkins, Lena Georgia — *Oxford* — Ed. Hy. Ms.
Assistant in Oxford High School.

Perkins, Walter Ezra — *Old Town* — Ms. Ps. Rm.

Pettegrew, Herbert Tracy — *East Machias* — Hy. Rm.

Proctor, Clarence William, A. B., Bowdoin, 1898. — *North Windham* — Ed.

Rowell, Frank Lester — *Canaan* — Ed.
District Superintendent Canaan and Clinton.

Russell, Mary Etta — *Orono* — Bl.

Ryan, John Bernard — *Orono* — Ms. Rm.

Ryan, Philip Eary — *Milltown* — Ms. Rm.

Sanborn, Arnold Merriam, A. B. — *Wilton* — Ed. Ps.
Colby College, 1908. Principal of Calais High School.

Scott, Arthur Leon — *Portland* — Ch. Gm. Ms.

Shaw, Christine Myrtle — *Orono* — Rm.

Shaw, Franklin Aked — *Orono* — Lt. Rm.

Sinclair, Roy Leighton — *Yarmouth* — Lt. Ps. Rm.
Principal of Grammar School.

Smith, Herman Brackett — *Saco* — Hy. Rm.

Smith, Leon Charles — *Topsham* — Eh. Ms.

Stanley, Winthrop Hamor — *Hull's Cove* — Ms. Ps. Rm.
Sub-Master of Norway High School.

Stetson, May Frances — *Caribou* — Eh. Rm.
Teacher of Dramatic Art and Expression, Seminary, Bucksport.

Tabor, James Atwood, Jr. — *Corinna* — Lt. Ms. Rm.

Taft, Leanora Ellen — *Boston, Mass.* — Ch. Ec. Ed. Lt. Ms.
Teacher in Grammar School.

Taylor, Josiah Willard, B. A. *Turner* Ed.
Wesleyan University, 1902. Superintendent of Schools, Turner and Clinton.
Thomas, Anna Louise *Canton* Ed. Eh. Lt. Rm.
Tibbetts, William Herbert *Bangor* Eh. Gm. Rm.
Principal of Searsport High School.
Trafton, Berdena Esther *Hartland* Ed. Eh. Lt.
Assistant in Skowhegan High School.
Tucker, Samuel Gordon *Bangor* Ch. Eh. Gm.
Pastor A. C. Church, Bucksport.
Wade, Mary Isabelle *Portland* Ch. Eh.
Wadleigh, Jennie Mitchell *Old Town* Gm. Lt.
Teacher.
Wass, Clifton Ennis *Sangerville* Ec. Ed. Lt.
Superintendent of Schools, Sangerville and Greenville.
Weatherlow, Jane Knight, A. B., *Seneca Falls, N. Y.* Gm. Lt.
Principal of High School.
Whitcomb, Newell Bryant *Bangor* Eh. Ms. Ps.
Wildes, Robert Patten *Skowhegan* Ch. Rm.
Williams, Harvey Reed *South Braintree, Mass.* Ec. Eh. Hy.
Grammar Master.
Winchester, Sidney Hodge *Corinna* Ms.
Wiseman, Bessie Hinton *Milford* Bl. Hy.
Teacher.
Wormwood, Alice Eleanor *Old Town* Lt. Rm.
Young, Myrtie Gertrude *Washington, D. C.* Ed. Rm.
Principal in Public Schools, Washington, D. C.

THE COLLEGE OF LAW

GRADUATE STUDENTS

Blanchard, Benjamin Willis, LL. B. *Bangor* 118 Congress St.
University of Maine, 1904
Bowker, Edgar Marshall, LL. B. *Whitefield, N. H.*
George Washington University, 1902.
Bridges, Corril Ellsworth, LL. B. *Charlestown, Mass.*
Albany Law School, 1887.
Brown, Leon Gilman Carleton, LL. B. *Milo.*
University of Maine, 1905.
Clough, George Edwin, LL. B. *Monson, Mass.*
University of Maine, 1904.

Cook, Harold Elijah, LL. B. *Waterville*
University of Maine, 1900.
Cotton, Carl, B. A., LL. B. *Contoocook, N. H.*
Colby College, 1900. University of Maine, 1906.
Davis, Waldo Trevor, B. A., LL. B. *Worcester, Mass.*
Dartmouth College, 1901. University of Maine, 1905.
Dudley, John Perley, LL. B. *Houlton*
Colby College. University of Maine, 1908.
Folsom, LeRoy Rowell, B. S., LL. M. *South Norridgewock.*
University of Maine, 1895, 1907.
Foster, Walter Herbert, LL. B. *Dorchester, Mass.*
University of Maine, 1905.
Fox, Lewis Edwin, LL. B. *Worcester, Mass.* 100 Parker St.
University of Maine, 1906.
Graton, Claude Dewing, LL. B. *Burlington, Vt.*
University of Maine, 1900.
Greeley, Archer Rawson *Webster, Mass.*
Kenniston, Hartley Garfield, LL. B. *Portland*
University of Maine, 1902.
Lewis, Charles Goodell, LL. B. *Boston, Mass.*
University of Maine, 1908.
Libby, Arthur Stephen, B. A. *Spartanburg, S. C.*
University of Maine, 1903.
Linehan, Daniel Joseph, LL. B. *Haverhill, Mass.*
University of Maine, 1905.
Lord, Harry, LL. B. *Bangor* 82 Cumberland St.
University of Maine, 1902.
Merrill, John Bryant, LL. B. *Bangor* 18 Jefferson St.
University of Maine, 1904.
Monroe, Edward Roy, LL. B. *Portland*
University of Maine, 1907.
Montague, Henry Burt, LL. B. *Southbridge, Mass.*
Cornell University, 1895.
Noble, Ernest Eugene, B. A., LL. B. *Portland*
Colby College, 1897. University of Maine, 1903.
Nolan, Harry McDonald, LL. B. *Haverhill, Mass.* 92 Cumberland St.
University of Maine, 1908.
Perkins, DeForest Henry, Ph.B., M. A., LL. B. *Skowhegan.*
University of Maine, 1900, 1905. Illinois College of Law, 1906.
Purinton, Frank Howard, B. A., LL. B. *Lewiston.*
Bates College, 1896. University of Maine, 1908.

Putnam, Varney Arthur, B. A., LL.B. *Danforth.*
Colby College, 1899. University of Maine, 1902.
Plumstead, Frank, B. A., LL. B. *Waterville*
Bates College, 1896. University of Maine, 1901.
Record, Lewis Stillman, Ph. B., LL. B. *Ashland, N. H.*
Brown University, 1902. University of Maine, 1905.
Reid, Charles Hickson, LL. B. *Bangor* 60 Lincoln St.
University of Maine, 1903.
Robinson, Curville Charles, LL. B. *New York City*
University of Maine, 1905.
Robinson, William Henry, LL. B. *Bangor* 42 Hammond St.
University of Maine, 1902.
Seavey, Ernest Linwood, LL. B., *Caribou*
University of Maine, 1908.
Skillin, Carroll Brown, LL. B. *North Yarmouth* 25 State St.
University of Maine, 1908.
Violette, Nil Louis, B. A., LL. B. *Van Buren*
St. Mary's College. University of Maine, 1903.
Warren, John Clifford, B. S., LL. B. *Portland*
University of Maine, 1902. Boston University, 1905.
Waterhouse, William Henry, LL. B. *Old Town*
University of Maine, 1900.

SENIORS

Andersen, Albert Edward, *Portland* 107 Third St.
Archer, Hiram John, *Boston, Mass.* 25 State St.
Boston University. Member of the Massachusetts State Bar.
Brackett, Harry Mortimer *Berwick* 252 Harlow St.
Bridgham, Edward William *Bridgton* 107 Third St.
Cartier, Arthur Jean Baptiste *Biddeford* 176 Court St.
Elder, Harry Robertson *Chicopee Falls, Mass.* The Hayward
Ellis, Henry Allan *Hyannis, Mass.* 25 State St.
Member of the Massachusetts State Bar.
Fitz-Randolph, Reginald *Boulder, Colo.* 24 Sixth St.
Boston University, College and Law School.
Fraser, William Clayton *Taunton, Mass.* 11 Boynton St.
Gallagher, Thomas Francis *Bangor* 34 Elm St.
Gardner, Henry, Jr. *Brockton, Mass.*
Beta Theta Pi House, Orono
Goss, Harold Isaac *Berwick* 48 Summer St.
Halliday, Frank Wade, B. A., M. A., *Monmouth* 179 Forest Ave.
Dartmouth College, 1901 and 1903.

Holman, William Harrison	*Dixfield*	316 Hammond St.
Kiernan, James Francis	*Wareham, Mass.*	265 Main St.
Brown University. Member of the Massachusetts State Bar.		
May, Seth	*Auburn*	2 Fourth St.
University of Maine.		
Morrison, Roy	*Saco*	22 Park View Ave.
University of Maine.		
Perkins, James Blenn, B. A.,	*Boothbay Harbor*	77 Broadway
Bowdoin College, 1903.		
Riggs, Verne Lester	*Livermore Falls*	92 Cumberland St.
Sanders, Thomas Andrew	*Sangerville*	176 Court St.
Small, Cyrus Fremont	*Caribou*	107 Third St.
Snow, Forrest Belmont	*Bluehill*	48 Summer St.
Toole, Christopher, Jr.	*Bangor*	48 Ohio St.
Weeks, William Marston, B. D., LL. B.	*Lebanon, Tenn.*	250 French St.
Yale University, 1896. Cumberland University, 1908. Member of the Tennessee State Bar.		

JUNIORS

Anderson, William Lewis	*Hartland*	7 Boynton St.
University of Maine.		
Arey, Ralph Winfield	*South Brewer*	
Bass, Frank Lyman, B. A.	*Bangor*	82 Third St.
Bowdoin College, 1907.		
Caplan, Israel Harry	*Portland*	67 Summer St.
Elmassian, Astor	*Lynn, Mass.*	47 Fifth St.
Emery, Oscar Harris	*Bar Harbor*	28 Davis St.
Evans, John Higgins	*Bar Harbor*	11 Boynton St.
Grady, Edward Joseph	*Bangor*	92 First St.
Havey, Andrew Percy, B. A.,	*West Sullivan*	77 Broadway
Bowdoin College, 1903.		
Jones, Lawrence Vivian	*Bangor*	37 Fifth St.
Jude, William Floyd	*Ellsworth*	67 Summer St.
Bowdoin College.		
Lemaire, Charles Wendell	*Taunton, Mass.*	11 Boynton St.
Mitchell, Robie Lawton, B. A.	*West Newfield*	7 Boynton St.
University of Maine, 1907.		
Packard, Bertram Everett, B. A.	*Litchfield*	77 Broadway
Bates College, 1900.		
Sawyer, Joseph Warren	*Milbridge*	183 Hammond St.
Taylor, Henry Nathan	*Portland*	67 Summer St.

FIRST YEAR

Blaisdell, William Bradley	*North Sullivan*	77 Broadway
Campbell, Collen Carroll	*Provincetown, Mass.*	62 Holyoke St., Brewer
Carter, Rodney Walker	*Bluehill*	199 Cedar St.
Chesley, Franklin Russell	*Saco*	229 State St.
Clarke, Percy Truman	*Egypt*	Y. M. C. A. Bldg.
Conary, Wilfred Grindle	*Bluehill Falls*	199 Cedar St.
Conners, George Leroy	*North Attleboro, Mass.*	The Jerrard
Fellows, Raymond, B. A. University of Maine, 1908.	*Bucksport*	7 Boynton St.
Getchell, Carl Folsom, B. A. Dartmouth College, 1905.	*Monmouth*	145 Pine St.
Gould, Daniel Israel Bowdoin College.	*Bangor*	216 Palm St.
Grinnell, Herbert Leroy, Jr., B. A. Bowdoin College, 1902.	*Bath*	7 Brimmer St., Brewer
Harvey, Brad Dudley	*Haverhill, Mass.*	147 Essex St.
Hosmer, Charles Bridgham	*Hudson, Mass.*	474 Main St.
Liggett, John Edmund	*Augusta*	72 West Broadway
Lothrop, Eaton Whiting	*Lynn, Mass.*	79 Kenduskeag Ave.
Mullins, Thomas Henry	*Cambridge, Mass.*	24 Ohio St.
Owens, William Daniel	*Haverhill, Mass.*	147 Essex St.
Roberts, Willis Elmer, B. A. Bowdoin College, 1907.	*Brunswick*	77 Broadway
Rollins, Kenneth Albert University of Maine.	*Farmington Falls*	7 Boynton St.
Sherry, Charles Ernest	*Boxboro, Mass.*	Y. M. C. A. Bldg.
Snow, Charles Augustus University of Maine.	*Milo*	Y. M. C. A. Bldg.
Spencer, Bertrand Edwin, B. A. Dartmouth College, 1906.	*Lennox, Mass.*	Y. M. C. A. Bldg.
Sweeny, William Henry	*Worcester, Mass.*	79 Kenduskeag Ave.
Sweetser, George Roy University of Maine.	*Hampden*	
Tersag, Jacob Kevork, B. A.,	*Mamouret-ul-Aziz, Armenia*	350 Union St.
Varney, Henry Harrison	*East Rochester, N. H.*	Orono

SPECIAL STUDENTS

Chandler, Rey Carroll Delwin	*Bangor*	22 Short St.
Clancy, Frank Bernard	*Nashua, N. H.*	24 Ohio St.
Currier, Alger Veazie	*Hallowell*	77 Center St.
Doak, Carleton	*Belfast*	62 Holyoke St., Brewer
Druker, Joseph Matthew	*Portland*	10 Essex St.
Higgins, Percy Elmer	*Ellsworth*	67 Summer St.
Littlefield, Frederic Baxter	*New York City*	Y. M. C. A. Bldg.
Mahan, John Francis	*Boston, Mass.*	Windsor Hotel
Pelletier, Jean Baptiste St. Mary's College.	*Van Buren*	Y. M. C. A. Bldg.
Powers, Elisha Shaw Bowdoin College.	*Houlton*	229 State St.
Sacknoff, Harry Alvah	*Portland*	Y. M. C. A. Bldg.
Wood, Louis Spencer	*Boston, Mass.*	25 State St.

WINTER COURSES

GENERAL AGRICULTURE

Allen, Harry Clinton	Buckfield, R. F. D. No. 2
Cross, Herman	Belfast, R. F. D. No. 3
Fuller, Paul Jones	Canton Point
Gile, Leland Henry	Alfred
Libby, John Samuel, Jr.	Harmony
Potter, Frank	Old Town
Sanborn, Arthur Chase	East Machias
Scott, Clarence	Old Town

POULTRY MANAGEMENT

Aiken, Herbert	Brewer
Aiken, Mary B.	Brewer
Baker, E. D.	Bangor
Bates, Gertrude	La Grange
Carlisle, Harry H.	Bangor
Clark, W. F.	Winterport
Cloudman, C. C.	Bangor
Dickey, Eva Augusta	Greene
Dillingham, Charles A.	Bangor, R. F. D. No. 8
Emery, Julian	Salisbury Cove

Folsom, Fred J. (Mrs.)	Stillwater
Goodell, E. E.	Bangor
Haseltine, Fred L.	Ripley
Hodgson, Fred W.	Robbinston
Hoyt, William	Dexter
Jackson, Daniel H.	Sebago
Kendall, O. J.	Brewer
Labree, Frank	Bangor
Lamb, W. R.	Addison, N. Y.
Longley, J. R.	Plymouth
Lougee, H. A.	Bangor
Lynn, Dana W.	Bangor, R. F. D. No. 8
Mayo, Ina G.	Orono
McKenney, Julia F.	Stillwater
Neally, E. R.	Brewer
Norton, Charles E.	North Haven
Perkins, Edward	Milford
Reed, Edwin A.	Orono
Sawtelle, A. M.	Orono
Sawyer, Ella	Old Town
Sawyer, Fred	Old Town
Scripture, John	Bangor
Smith, Sterling S.	Brooklyn, N. Y.
Spruce, Joseph	Milford
Staples, A. R.	Bangor
Staples, A. R. (Mrs.)	Brooklyn, N. Y.
Stevens, E. W.	Lincoln
Tenny, F. W.	Orono
Thomas, William	Milford
Tupper, Frank H.	Bangor
Wilson, Charles, Jr.	Bangor

GENERAL SUMMARY

Faculty

President	1
Professors	33
Associate Professors	4
Assistant Professors	12
Instructors	24
Lecturers	7
Tutors	5
Assistants	4
Total	90
Other Officers	20
College of Arts and Sciences	46
College of Agriculture	38
College of Technology	44
College of Pharmacy	32
College of Law	11
Agricultural Experiment Station	21

Members of the general faculty are included in the faculties of the separate colleges when they give courses which are required therein

Students

Graduate Students		16
Seniors		103
Juniors		120
Sophomores		165
Freshmen		164
Short Pharmacy, Second Year	9	
First Year	10	19
Special Students		49

School Course in Agriculture, Second Year	9	
First Year	12	21
Summer Term		99
Winter Course in Agriculture		8
Winter Course in Poultry Management		41
College of Law, Graduate Students	37	
Seniors	24	
Juniors	16	
First Year	26	
Special Students	12	115
		920
Duplicated		36
Total		884

CLASSIFICATION BY RESIDENCE

Maine, by counties:		
Androscoggin	39	
Aroostook	32	
Cumberland	86	
Franklin	21	
Hancock	36	
Kennebec	25	
Knox	18	
Lincoln	11	
Oxford	36	
Penobscot	220	
Piscataquis	17	
Sagadahoc	12	
Somerset	29	
Waldo	17	
Washington	48	
York	46	693
Colorado	1	
Connecticut	10	
District of Columbia	1	
Maryland	2	
Massachusetts	127	
New Hampshire	20	

New Jersey	1	
New York	15	
Ohio	1	
Pennsylvania	1	
Rhode Island	2	
South Carolina	1	
Tennessee	1	
Texas	1	
Vermont	1	185
Armenia	1	
China	2	
New Brunswick	1	
Porto Rico	1	
South America	1	6
Total		884

Classification by Colleges

College of Arts and Sciences	175
College of Agriculture	150
College of Technology	420
College of Pharmacy	24
College of Law	115
	884

STUDENTS REGISTERED FOR FARMERS' WEEK, 1908

Abbott, Frances	Orono
Abbott, Fred	Orono
Abbott, Margaret A.	Orono
Adams, Lillian	So. Royalton, Vt.
Adams, Mrs. E. R.	Bangor
Allen, Mrs. Charles S.	Intervale
Allen, Charles S.	Intervale
Aiken, Mary B.	Brewer
Andrews, G. L.	Bangor
Atwood, Mrs. W. F.	Bangor
Aubert, Mrs. A. B.	Orono
Bailey, H. M.	Wiscasset
Bailey, B. A.	Wiscasset
Baker, A. M.	Hampden Corner
Banks, C. F.	Bangor
Banks, Mrs. C. F.	Bangor
Barker, P. C.	Canton
Barrows, Anna	New York City
Barrows, Mrs. G. W. E.	Bangor
Bartlett, E. L.	Bangor
Bartlett, Emily	Orono
Bartlett, Frances D.	Orono
Bartlett, Mrs. J. M.	Orono
Bateman, L. C.	Lewiston
Bates, I. M.	Corinna
Bean, Ida	Old Town
Bearce, Ralph	Ashland
Bigney, Marion	Greenville
Bigney, Henrietta	Greenville
Bishop, L. W.	Lagrange
Black, H. C.	Hebron
Black, Mrs. H. C.	Hebron
Blaisdell, T. E.	E. Franklin
Blair, Lyman	Greenville
Blethen, G. P.	Thorndike
Bodge, A. R.	Dexter
Boardman, Mrs. H. S.	Orono
Boardman, Mrs. J. A.	Bangor
Boardman, S. L.	Bangor
Bolton, Mrs. H. I.	Bangor
Brackett, C. G.	Newport
Bradley, C. E.	Island Falls
Bradley, Raymond	Island Falls
Brett, B. C.	Auburn
Brewer, O. E.	Lagrange
Bridge, J.	Dexter
Bridges, Vernon	Sangerville
Brooks, F. E.	Corinna
Brown, Mrs. C. B.	Orono
Brown, Mrs. W. S.	Orono
Buck, Mrs. H. B.	Bangor
Buraby, Rose	Orono
Butterfield, Carrie	Bangor
Campbell, Mrs. P. A.	Orono
Carleton, Mrs. F. A.	Bangor
Carr, Mrs. Francis	Bangor
Carter, C. E.	Bangor
Chandler, A. J.	Bangor
Chaney, May	Orono
Chase, M. C.	No. Bangor
Chase, Mrs. M. E.	Sebec
Chase, F. P.	Upper Mills, N. B.

Chase, Mrs. G. D. Orono
Clark, Mrs. C. L. Hampden
Clements, C. C. Winterport
Clements, Mrs. C. C. Winterport
Colburn, Mrs. W. Orono
Cook, C. A. Milton, Mass.
Craig, J. M. Orono
Craig, William Auburn
Crosby, Grace Orono
Cross, M. H. Bangor
Curtis, Mrs. E. I. Orono
Curtis, Mrs. W. M. Orono
Daggett, Ida Bangor
Daggett, Mrs. Russell Orono
Dakin, Florence Bangor
Danforth, Agnes Bangor
Davidson, Mrs. Charles Bangor
Davee, Mrs. E. W. Orono
Davies, H. W. Oxford
Davis, F. O. Waterville
Day, B. W. E. Parsonsfield
Dempsey, Harold Stillwater
Dempsey, M. H. Stillwater
Dexter, H. P. Dexter
Dickey, Mrs. W. P. Bangor
Dickey, E. A. Greene
Dillingham, C. A. Hampden
Dillingham, Mrs. C. A. Hampden
Dinsmore, F. A. Anson
Doak, Mrs. S. A. Bangor
Donovan, D. E. Marshville
Downing, John Oxford
Drew, Mrs. G. A. Orono
Driscoll, S. C. Jonesboro
Drummond, A. D. E. Corinth
Duncan, Belle Orono
Dunn, J. L. Cumberland Center
Durgin, Mrs. J. Bangor
Dyke, Mrs. Z. C. Orono
Eastman, A. A. Dexter
Eastman, Mrs. David Old Town
Erickson, G. E. Brewer
Estabrooke, Mrs. K. C. Orono
Fairbanks, Mrs. H. L. Bangor
Farnham, May Bangor
Farnham, H. E. Bangor
Faunce, Mrs. M. E. Guilford
Fernald, Mrs. M. C. Orono
Fogg, W. O. Hulls Cove
Foss, O. W. Hancock
French, G. H. Augusta
Freeze, Elizabeth Bangor
Friend, Gertrude Bangor
Friend, Mrs. Joseph Bangor
Frye, Mrs. H. R. Bangor
Gales, Mrs. Charles Guilford
Gannett, Mrs. J. C. Yarmouth
Garland, C. A. Bangor
Gee, Annie M. Orono
Gerrity, Mrs. J. F. Bangor
Getchell, Harriet J. Old Town
Gilman, A. W. Foxcroft
Gilmore, Edith Brewer
Goggins, Elizabeth Orono
Goodell, R. I. Hampden Corner
Goodell, Mrs. R. I. Hampden Cor.
Goodridge, N. E. Orono
Goodridge, O. T. Orono
Gould, B. L. Milo
Graves, A. C. Northeast Harbor
Graves, Mrs. A. M. Orono
Grant, F. H. Bangor
Gray, Delia Orono
Griffin, P. B. Waldoboro
Grover, Mrs. A. L. Orono
Hall, C. A. Brewer
Halston, L. A. Cumberland Mills
Hamilton, Mrs. H. A. Orono
Hamilton, John Washington, D. C.
Hamilton, May Orono
Hamlin, Emily Orono
Hamlin, Mrs. L. A. Orono

Hamlin, Mrs. R. J.	Orono
Hanson, Mrs. H. H.	Orono
Harding, B. E.	Danforth
Harding, Mrs. Fay	Orono
Harmon, W. W.	Woodfords
Harris, J. M.	W. Minot
Harris, Mrs. J. M.	W. Minot
Hart, Mrs. J. N.	Orono
Hart, S. L.	Guilford
Harvey, Mrs. A. L.	Orono
Haskell, E. J.	Westbrook
Haskell, Mrs. E. J.	Westbrook
Hatch, Mrs. W. S.	Orono
Haynes, A. T.	Exeter
Haynes, Mrs. A. T.	Exeter
Heald, W. H.	Paris
Hendrickson, Peter	Auburn
Hersey, E. C.	E. Dover
Hitchings, E. F.	Waterville
Hook, Mrs. Nina	Orono
Hopkins, H. B.	E. Holden
Hopkins, Mrs. M. D.	Bangor
Houlton, E. A.	Fort Fairfield
Hoyt, J. W.	Dexter
Hoyt, Mrs. J. W.	Dexter
Huddilston, Mrs. J. H.	Orono
Hurd, Mrs. W. D.	Orono
Ireland, Mrs. C. F.	Bangor
Ireland, Gladys	Bangor
Ireland, Marion	Bangor
Jackman, Mrs. W. F.	Orono
Jewett, Mrs. A. C.	Orono
Jewett, J. E.	Norridgewock
Johnson, C. E.	Machias
Jones, Mrs. C. L.	Corinna
Jones, Willard	Lewiston
Jordon, H. G.	Lewiston
Jose, L. W.	Dexter
Jose, S. C.	Dexter
Keen, L.	Hebron
Kelley, Mrs. John	Orono
Kelley, Charlotte	Orono
King, Alfred	Portland
Lane, L. K.	Orono
Lane, Mrs. N. W.	Orono
Lewis, Mrs. A. F.	Orono
Lieb, Mrs. E. L.	Orono
Leland, C. R.	Mechanic Falls
Leland, J. W.	Sangerville
Leland, W. R.	Mechanic Falls
Lindsay, A. H.	Carroll
Longley, J. R.	Plymouth
Look, J. S.	Jonesboro
Lord, E. E.	Fairfield
Maloney, Mrs. J. E.	Orono
Mayo, E. P.	Waterville
Mayo, Ina G.	Orono
Mayo, R. H.	Bradley
McClintock, Mrs. J. E.	Orono
McCormick, John	Bangor
McIntyre, J. C.	Seal Harbor
McKeen, B. W.	Fryeburg
McKusick, M. B.	Guilford
Melvin, Louise	Orono
Merrill, Hattie	Orono
Merrill, L. S.	Solon
Merritt, Mrs. G. B.	Bangor
Merryman, Mrs. R. S.	Orono
Millett, C. R.	W. Monmouth
Morrill, H. E.	Foxcroft
Morris, A. L.	Fort Fairfield
Morrison, Mrs. A. F.	Bangor
Morrison, Ida	Orono
Morrison, J. T.	Lagrange
Morrison, R. V.	Bangor
Moulton, Herbert	Hiram
Murch, Mrs. C. E.	Orono
Morse, Mrs. Warren	Brewer
Morse, Mrs. W. J.	Orono
Nason, C. A.	Hampden Corner
Nason, Mrs. William	Stillwater
Neally, E. R.	Brewer

Neally, Meldon	Brewer
Newman, Mrs. S. R.	Orono
Newton, A. C.	Skowhegan
Norton, Charles E.	North Haven
Norton, Mrs. F. A.	Old Town
Oak, Mrs. M. C.	Orono
Ormsby, Mrs. W. H.	Orono
Page, I. M.	Bangor
Page, Mrs. I. M.	Bangor
Palmer, L. R.	No. Dexter
Parcher, Mrs. M. J.	Orono
Park, Mrs. J. I.	Orono
Parkman, H. L.	Newport
Patch, Mrs. W. Y.	Bangor
Patterson, M. C.	Hampden Corner
Paine, George	Caribou
Pease, J. L.	Corinna
Pennington, F. H.	Garland
Pennington, Mrs. F. H.	Garland
Penny, Mrs. C. F.	Orono
Perry, B. C.	Milbridge
Perry, Mrs. B. C.	Milbridge
Philbrick, Mrs. C. S.	Bangor
Potter, F. A.	Old Town
Potter, Mrs. F. A.	Old Town
Prescott, Mrs. E. H.	Orono
Prince, Mrs. W. E.	Orono
Pullen, Mrs. H. M.	Bangor
Pullen, W. E.	Exeter
Quincy, Mrs. F. G.	Bangor
Ramsdell, Harvey	Addison
Reed, E. A.	Orono
Read, Mrs. D. S.	Stillwater
Read, Mrs. W. L.	Stillwater
Reed, Mrs. E. A.	Orono
Reynolds, Mrs. P. L.	Amherst, Mass.
Ricker, L. A.	Buckfield
Richardson, A. A.	Bangor
Roberts, J. A.	Norway
Robinson, S. R.	Auburn
Rogers, L. B.	Patten
Rolfe, Mrs. A. H.	Stillwater
Ring, Mrs. E. E.	Orono
Ring, Mrs. N. A.	Orono
Rooney, Daniel, Jr.	Brewer
Rooney, Mrs. Daniel, Jr.	Brewer
Rooney, N. F.	Brewer
Russell, Mrs. F. L.	Orono
Russell, Mary	Orono
Sawtelle, A. M.	Orono
Sevey, G. C.	Springfield, Mass.
Shaw, Mrs. A. M.	Orono
Shaw, Mrs. C. J.	Orono
Shaw, Elizabeth	W. Gouldsboro
Shaw, R. W.	Houlton
Sheldon, Mrs. G. C.	Orono
Simpson, Everett	Corinna
Skofield, B. W.	Hodgdon
Small, A. L.	Litchfield
Small, B. F.	Old Town
Small, E. M.	Litchfield
Smith, Edna	Old Town
Smith, Mrs. J.	Old Town
Smith, L. H.	So. Brewer
Smith, S. S.	Brooklyn, N. Y.
Snow, H. A.	Orono
Snow, Mrs. J. H.	Bangor
Sprague, Mrs. R. J.	Bangor
Sterry, Annie	Stark
Sterry, Llewellyn	Stark
Sterry, Mrs. L.	Stark
Stetson, C. S.	Alta
Stevens, Mrs. J. S.	Orono
Steward, G. D.	Skowhegan
Stockworth, J. S.	Corinna
Stratton, C. W.	Hancock
Sturtevant, H. W.	Milo
Sullivan, H. W.	Kents Hill
Surface, Mrs. F. M.	Orono
Sutton, Arra	Orono
Sweet, W. A.	East Holden
Sweetser, F. R.	Cumberland Ctr.

Sylvester, A.	Westfield	Webber, Mrs. C. B.	Orono
Sylvester, A. C.	Mars Hill	Webster, A. P.	Boston, Mass.
Sylvester, D. C.	Westfield	Webster, Mrs. J. H.	Orono
Taylor, J. M.	Hermon	Weeks, W. S.	Augusta
Tenney, F. W.	Orono	Weld, Clare	Old Town
Thompson, Mrs. J. A.	Bangor	Weld, Mrs. G. G.	Old Town
Thompson, S. C.	Winterport	Weld, Ivan C.	Old Town
Thorpe, B. F. W.	Augusta	West, O. E.	Milo
Tilley, E. G.	Ashland	Weston, Mrs. Ada	Old Town
Tilley, L. K.	Ashland	Weston, Mrs. Annie	Old Town
Tilton, F. S.	Charleston	Weston, Mrs. F. C.	Bangor
Todd, F. R.	Syracuse, N. Y.	Wheeler, L. H.	Bangor
Tomlinson, Mrs. Edward	Orono	Whitcomb, C. A.	Ellsworth Falls
Towne, Mrs. A. W.	Sebec	Whitcomb, F. E.	Orono
Tower, Mrs. G. E.	Orono	Whitcomb, Mrs. Willis	Bangor
Tracy, A. B.	St. Albans	White, Mrs. S. T.	Bangor
Treat, A. C.	Stockton Springs	Whitney, F. P.	Old Town
Treat, Mrs. A. C.	Stockton Springs	Whitney, Mrs. F. P.	Old Town
Turner, Mrs. M. E.	Bradford	Whittemore, B. C.	Orono
Vail, F. S.	Yarmouth	Wing, Mrs. M. E.	Old Town
Vaughan, W.	Belfast	Wing, May	Orono
Waid, Mrs. E. D.	Orono	Wing, Mrs. N. W.	Levant
Walden, E. O.	Greenville	Woodard, Mrs. W. H.	Stillwater
Webb, Emma	Bangor	Woods, Mrs. C. D.	Orono
Webb, Mrs. J.	Bangor	Worcester, C. S.	Bangor

STUDENTS WHO HAVE BEEN ENROLLED IN THE CORRESPONDENCE COURSES SINCE DECEMBER FIRST, 1907

Adkins, F. E.	Livermore	Bragdon, J. D.	Kennebunk
Astburry, R. L.	Biddeford	Burnell, R. C.	Sebago
Atkins, A. N.	Dexter	Burns, C. H.	Mechanic Falls
Bacon, R. M.	Bryant's Pond	Clark, E. W.	E. North Yarmouth
Bailey, W. L.	Andover	Cleaves, F. W.	Eliot
Baymund, M. H.	Dexter	Coffin, Mrs. F. B.	Gilead
Beal, M. H.	E. Dover	Day, H. S.	Lewiston
Bean, G. M.	Mt. Vernon	Doughty, A. W.	Cumberland
Berry, F. N.	So. Bridgton	Eastman, A. A.	Dexter
Berry, L. P.	Houlton	Eastman, W. H.	Corinna
Bither, L.	Houlton	Eaton, C. P.	Notch

Elliott, D. D. Monmouth
Farnham, H. E. Bangor
Ferry, J. J. Bangor
Fuller, P. J. Canton Pt.
Getchell, H. P. Foxcroft
Glover, E. A. Bowerbank
Glover, R. Hebron
Gould, W. H. Millinocket
Greely, S. D. Hampden Cor.
Grindle, J. S. Northeast Harbor
Harding, B. E. Danforth
Hartell, R. Brunswick
Harriman, M. I. Kent's Hill
Heagan, E. A. Belfast
Hill, H. S. Yarmouth
Hocock, E. H. Washington, D. C.
Jackson, D. H. Sebago
Johnson, B. H. Athens
Jones, C. H. Kent's Hill
Jones, C. N. Kent's Hill
Jones, F. R. Mercer
Jones, Mrs. J. A. Oakland
Keening, Mrs. A. N. Winthrop
Knowles, S. W. Corinna
Leavitt, L. C. Kezar Falls
Liggett, J. E. Augusta
Lincoln, H. M. Corinna
Livermore, E. W. E. Dover
Look, E. W. Addison
Lord, E. E. Fairfield
Lowe, Mrs. Nellie Orono
Lowd, C. O. Berwick
Marshall, M. A. No. Bradford
Marvin, G. T. W. Somerville
Mason, Carrie L. Winchester, Mass.
McAllister, R. R. Lovell
McComb, C. B. Dexter
McKeen, H. W. Cumberland Cen.
Moulton, F. D. So. Bridgton
Palmer, F. S. E. Sumner
Palmer, R. L. Bath
Parker, H. P. Brooklyn
Parkman, H. P. Brooklyn, N. Y.
Parkman, Fred Skowhegan
Porter, G. S. Houlton
Ridley, J. N. Auburn
Ring, H. A. Sisco, Fla.
Robinson, Mrs. M. F. Peru
Robinson, E. M. Brooklyn, N. Y.
Rose, E. E. Bath
Rose, F. J. Bath
Ross, L. A. Saugus, Mass.
Russell, O. Y. Danforth
Seamans, R. E. Princeton
Shaw, H. L. Buckfield
Shepherd, L. C. Dexter
Smith, E. B. E. Dover
Smith, Dr. O. Portland
Steward, J. H. Damariscotta
Stuart, H. H. Hallowell
Swazey, J. M. Lincoln
Taylor, J. W. Turner
Thompson, H. W. Mapleton
Tinker, Miss Florence C. Lamoine
Tinker, E. E. Lamoine
Tinker, E. B. Lamoine
Townsend, J. R. Augusta
Tripp, C. H. Rochester, N. H.
True, B. G. Clinton
Upton, J. F. Winnegance
Vaill, F. S. Portland
Vaughan, Malcolm Belfast
Vaughan, O. B. Belfast
Wadsworth, C. S. Presque Isle
Watson, Lillian G. So. Portland
Webster, G. W. Strong
Weiss, F. F. Needham H'ts, Mass.
Welsh, D. L. Brooklyn, N. Y.
Whitaker, L. Berwick
Whitman, E. W. Bryant's Pond
Wing, T. B. York Village
Wright, Lois Medford, Mass.
Young, R. T. Lamoine

INDEX

	PAGE
Absence from examinations,	39
Administration, officers of,	10
Admission,	47
by certificate,	48
by examination,	48
general requirements,	47
local examinations for,	48
of college graduates,	47
of special students,	48
preliminary examinations for,	48
requirements for,	49
to advance standing,	47
to College of Law,	169
to special and extension courses,	48
Agricultural chemistry,	64
Agricultural Experiment Station	176
building,	23
Council,	7
equipment,	178
faculty	176
investigations	178
object,	177
publications,	179
Agriculture, College of,	137
building,	25
correspondence courses,	146
demonstration work,	147
extension courses,	146
faculty,	137
school course,	143
special courses,	143
teachers' course,	141
winter courses,	145
Agronomy,	58
course,	139
Alpha Zeta,	34
Alternating currents,	83
Alumni associations,	8
Alumni Hall,	22
Animal Industry,	60
course,	139
Anthropology,	78
Appointments,	185
Art,	97
museum,	32
Arts and Sciences, College of,	126
degrees,	129
departments,	128
faculty,	126
Associations,	33
Astronomy,	105
Athletic field,	28
Bacteriology,	62
Battalion,	113
Bibliography,	63
Biological chemistry,	63
Biology,	64
entrance,	57

Index

PAGE

Board, 43
Bond, 43
Botany, 67, 69
Buildings and equipment, 21
Bulletins of the experiment station, 179
Business Law, 79
Calendar, 3
Catalog, annual, 35
Central heating plant, 25
Cercle Francais, 34
Certificate, admission by 48
Certificate board, 49
Certificates in agriculture, 144
Chemical Engineering course, 154
Chemistry, 69, 72
  course, 153
  entrance, 57
  industrial, 71
  organic, 70
  physical, 72
Civil Engineering, 73
  course, 156
Classical course, 129
Coburn Hall, 21
Commencement exercises of 1908, 180
  parts, 40
Committees of the faculty, 16
Correspondence courses, 146
Courses of Study,
  Agricultural, 139
  Agronomy, 140
  Animal Industry, 140
  Chemical, 153
  Chemical Engineering, 154

PAGE

  Civil Engineering, 156
  Classical, 129
  Electrical Engineering, 161
  Forestry, 147
  Horticultural, 140
  Law, 169
  Mechanical Engineering, 159
  Pharmacy, 164
  Scientific, 129
  Short Pharmacy, 167
  Special, 48
Dairy building, 24
Dairying, 61
  winter course, 145
Debate, 88
Declamations, 86
  sophomore prize, 46, 86
Degrees, 40
  advanced, 41
Degrees conferred, 1908, 180
Departments of instruction, 58
Deposits, 44
Dormitories, 44
Dramatic Club, 34
Drawing, 111
Drill, hall, 36
  military, 36, 112
Economics, 77
Education, 80, 81, 133, 141
Ethnology, 79
Electrical engineering, 82
  course, 161
Embryology, 66
Endowment of the University, 20

	PAGE
English	85, 89
entrance	51
literature	87
public speaking	86
Entomology	66
Entrance, dates of examinations	48
examinations	48
requirements	49
Essays	86
Establishment of the University	19
Ethics	116
Examinations, arrearage	39
entrance	48
rules with regard to	39
Excuses	38
Expenses of students	42, 132, 171
Extension work in Agriculture	146
Faculty, University	10
Agriculture	137
Arts and Sciences	126
Classification	215
Experiment Station	176
Law	169
Pharmacy	164
Technology	151
Farm Buildings	27
Fees, laboratory	43
Fernald Hall	21
Forestry	90
course	147
Fraternity houses	27
French	121
entrance	52
Geological collection	30
Geology	64
German	92, 94
entrance	53
Gothic	94
Graduation, requirements for	124
Greek	95
architecture	97
preparatory courses	96
religion	96
Gymnasium	33
Herbarium	32
Histology, animal	65
plant	67
History	98, 99
entrance	56
Holmes Hall	23
Honorary society	34
Honors	39
conferred, 1908	185
Horticultural building	24
course	140
Horticulture	100, 140
special course in	143
Hydraulics	76
Income of the University	20
Infirmary	27
International law	79
Italian	123
Junior exhibition	45
speakers, 1908	185
Kidder scholarship	45
Kittredge loan fund	45
Laboratory charges	43
Landscape gardening	101

Index

PAGE

Latin,....101, 104
Law, College of,.... 169
admission,.... 170
advisory board,.... 6
courses,.... 172
degrees,.... 171
expenses,.... 171
faculty,.... 169
methods of instruction,.... 171
Least squares,.... 119
Lectures, summer term,.... 131
Library,....24, 28, 131
Literati,.... 34
Loans,.... 44
Logic,.... 116
Lord Hall,.... 23
Lumbering,.... 91
Machine design,.... 109
Maine bulletins,.... 36
Major instructors,.... 128
Materia medica,.... 115
Mathematics,.... 104
entrance,.... 56
Mechanical engineering,.... 107
course,.... 159
Mechanics,.... 112
Mechanics and Drawing,.... 111
Medicine, preparation for,.... 129
Methodology,.... 81
Military, drill,....37, 112
instruction,.... 36
science, courses in,.... 112
science, requirements in,.... 36
uniform,.... 36

PAGE

Mt. Vernon House,.... 27
Museum,.... 30
New Testament Greek,.... 96
Oak Hall,.... 21
Observatory,....22, 131
Optics,.... 118
Organization of the University,.... 124
Organizations,.... 33
Passing rank,.... 39
advanced standing,.... 47
Pedagogy,.... 80
Pharmacy, college of,.... 164
course,.... 114
faculty,.... 164
short course,.... 167
Phi Kappa Phi,.... 34
members,.... 173
Philosophy,.... 116
Physical Geography,.... 57
Physical training,.... 37
course in,.... 117
Physics,.... 117
entrance,.... 57
Physiology,.... 65
Political economy,.... 77
Poultry Husbandry,.... 119
Power House,.... 25
Prescriptions,.... 115
Prizes,.... 45
awarded, 1908,.... 184
Psychology,.... 116
Publications,.... 35
Reading room,.... 28
Regulations of the University,.... 38

PAGE

Reports, of the Experiment Station, 36, 176
of standing, 39
of the University, 36
Requirements, for admission, 47
for graduation, 124
Rhetoric, 86
Romance Languages, 121, 123
Roman Epigraphy, 103
Roman Numismatics, 103
Roman Philosophy, 102
Rooms, 43, 132
Round Table, 35
Sanitary engineering, 74
Sanskrit, 103
Scholarship honors, 39
Scholarships, 45
School course in Agriculture, 143
Scientific courses, 129
Silviculture, 90
Short courses, 145
Societies, 33
Sociology, 78
Sophomore prize declamations, 46, 86
speakers, 1908, 185
Spanish, 122
Special courses, 143
Special students, 48
Students, catalog of, 187
classification of, 215
number of, 215
standing of, 39
Studies, quota of, 38
Structures, 76
Summer term, 130
expenses, 132
Surveying, 73
Technology, college of, 151
faculty, 151
Text-books, 43
Theology, preparation for, 129
Treasurer, 6
Trustees, board of, 6
executive committee of, 6
meetings of, 3, 4
Tuition, charges, 43
loans, 44
University, charter, 19
bulletins, 35
buildings and equipment, 21
circulars, 35
endowment, 20
establishment, 19
location, 21
object, 19
organizations, 124
Veterinary Science, 63
Wingate Hall, 22
Winter courses, 145
Woodwork, 107
Women, admission of, 47
Worship, public, 38, 131
Young Men's Christian Association, 35, 38
Young Women's Christian Association, 35
Zoology, 65
collections, 31

UNIVERSITY OF ILLINOIS-URBANA
3 0112 112205189